

Ohio, 11. Oregon, 8, 18, 19, 24, 25, 26, 27, 28, 29, 30, 31. Pennsylvania, 2, 3, 11, 20, 29. Rhode Island, 7, 11, 30. South Carolina, 7. Texas, 20. Utah, 10, 18, 22, 25, 28. Virginia, 4, 11, 20, 24. Washington, 8, 18, 19, 24, 25. West Virginia, 11. Wyoming, 28.

SLEET.

The following are the dates on which sleet fell in the respective States:

Alabama, 10, 13, 14. Arizona, 17. Arkansas, 10, 11, 19, 20, 24. California, 15, 26, 27, 28, 29, 30, 31. Colorado, 4, 28. Connecticut, 2, 11, 21. Delaware, 4. District of Columbia, 11. Georgia, 6, 10, 12, 14, 20, 22. Idaho, 1, 3, 17, 21, 22, 23. Illinois, 2, 10, 11, 20, 23, 24, 27. Indiana, 2, 3, 4, 6, 7, 10, 11, 21, 23, 31. Indian Territory, 10, 31. Iowa, 2, 3, 25, 26, 27, 28. Kansas, 10, 16, 20, 22, 23, 28. Kentucky, 3, 7, 10, 11, 12, 20. Louisiana, 13, 14. Maine, 3, 21, 30. Maryland, 2, 4, 7, 11, 20, 21, 30. Massachusetts, 2, 3, 11, 21. Michigan, 2, 3, 4, 15, 26, 29. Minnesota, 6, 26, 27, 28. Mississippi, 10, 13, 14, 27. Missouri, 1, 2, 4, 10, 11, 21, 22, 23, 24, 29, 31. Montana, 18, 20, 21, 25. Nebraska, 25, 27, 28. Nevada, 21, 23, 25, 27. New Hampshire, 3, 11, 21, 29. New Jersey, 3, 11, 21, 27, 29, 30. New Mexico, 16. New York, 2, 3, 11, 15, 20, 21, 28, 29, 31. North Carolina, 10, 11, 19, 20, 21, 24, 27. North Dakota, 3, 6, 13, 21, 25. Ohio, 2, 6, 7, 11, 21, 31. Oklahoma, 9, 10, 19, 20, 23. Oregon, 26, 27, 28, 30, 31. Pennsylvania, 2, 3, 5, 11, 12, 15, 17, 20, 21, 30. Rhode Island, 11, 30. South Carolina, 6, 10, 11, 14, 19, 20, 21, 22. South Dakota, 3, 26, 27, 28. Tennessee, 4, 5, 8, 10, 11, 16, 17, 19, 20. Texas, 13, 15, 20. Utah, 1, 11, 21, 22, 24, 25, 26, 27, 28, 30, 31. Vermont, 3, 21. Virginia, 4, 7, 10, 11, 12, 20, 21, 24. Washington, 8, 12, 18, 20, 24, 25, 26, 27, 28, 29, 31. West Virginia, 1, 2, 10, 11, 12, 20, 21, 22, 23, 25. Wisconsin, 26, 27, 28, 29. Wyoming, 22, 25, 26.

HUMIDITY.

The averages by districts appear in the subjoined table:

Average relative humidity and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	74	- 2	Missouri Valley	79	+ 1
Middle Atlantic	75	0	Northern Slope	74	+ 4
South Atlantic	78	0	Middle Slope	68	+ 1
Florida Peninsula	84	+ 2	Southern Slope	66	+ 2
East Gulf	77	- 1	Southern Plateau	47	- 4
West Gulf	75	0	Middle Plateau	71	+ 2
Ohio Valley and Tennessee	77	0	Northern Plateau	84	+ 3
Lower Lake	82	+ 1	North Pacific	87	0
Upper Lake	82	0	Middle Pacific	86	+ 5
North Dakota	78	- 3	South Pacific	71	- 3
Upper Mississippi Valley	80	+ 2			

ATMOSPHERIC ELECTRICITY.

Numerical statistics relative to auroras and thunderstorms are given in Table IV, which shows the number of stations from which meteorological reports were received, and the number of such stations reporting thunderstorms (T) and auroras (A) in each State and on each day of the month, respectively.

Thunderstorms.—Reports of 372 thunderstorms were received during the current month as against 104 in 1902 and 386 during the preceding month.

The dates on which the number of reports of thunderstorms for the whole country was most numerous were: 29th, 76; 27th, 54; 26th, 52.

Reports were most numerous from: Florida, 54; New York, 46; Louisiana, 39.

DESCRIPTION OF TABLES AND CHARTS.

By W. B. STOCKMAN, Forecast Official, in charge of Division of Meteorological Records.

For description of tables and charts see page 582 of REVIEW for December, 1902.

Auroras.—The evenings on which bright moonlight must have interfered with observations of faint auroras are assumed to be the four preceding and following the date of full moon, viz: 9th to 17th.

In Canada. Thunderstorms were reported from Ottawa, 17; Toronto, 29; Port Stanley, 29. An aurora was observed at Battleford on the 5th.

SUNSHINE AND CLOUDINESS.

The distribution of sunshine is graphically shown on Chart VII, and the numerical values of average daylight cloudiness, both for individual stations and by geographical districts, appear in Table I.

The averages for the various districts, with departures from the normal, are shown in the table below:

Average cloudiness and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	5.5	- 0.3	Missouri Valley	5.0	- 0.1
Middle Atlantic	6.1	+ 0.5	Northern Slope	4.8	+ 0.2
South Atlantic	6.0	+ 0.7	Middle Slope	4.6	+ 0.8
Florida Peninsula	6.4	+ 1.7	Southern Slope	4.4	+ 0.6
East Gulf	6.2	+ 0.6	Southern Plateau	3.4	+ 0.5
West Gulf	5.2	+ 0.8	Middle Plateau	4.6	- 0.2
Ohio Valley and Tennessee	6.6	+ 0.2	Northern Plateau	7.8	+ 0.5
Lower Lake	7.8	+ 0.3	North Pacific	8.2	+ 1.1
Upper Lake	7.0	+ 0.2	Middle Pacific	6.4	+ 1.3
North Dakota	5.3	+ 0.6	South Pacific	4.6	+ 0.6
Upper Mississippi Valley	5.8	+ 0.5			

WIND.

The maximum wind velocity at each Weather Bureau station for a period of five minutes is given in Table I, which also gives the altitude of Weather Bureau anemometers above ground.

Following are the velocities of 50 miles and over per hour registered during the month:

Maximum wind velocities.

Stations.	Date.	Velocity.	Stations.	Date.	Velocity.	Direction.	
Bismarck, N. Dak	6	63	nw.	North Head, Wash	1	60	s.
Block Island, R. I	12	55	w.	Do	2	58	s.
Do	18	50	nw.	Do	18	68	se.
Do	30	52	w.	Do	20	52	se.
Do	31	56	w.	Do	23	50	se.
Buffalo, N. Y	12	56	w.	Do	24	51	nw.
Do	15	52	w.	Do	29	84	se.
Do	30	64	w.	Omaha, Nebr	7	52	nw.
Carson City, Nev	24	50	sw.	Point Reyes Light, Cal	24	50	sw.
Do	25	60	sw.	Do	25	59	nw.
Do	26	63	sw.	Do	26	54	s.
Do	27	50	sw.	Do	27	72	s.
Cheyenne, Wyo	6	55	nw.	Do	30	58	s.
Cleveland, Ohio	7	54	nw.	Do	31	50	nw.
Do	30	54	w.	St. Louis, Mo	7	52	w.
Columbus, Ohio	29	50	w.	Sioux City, Iowa	6	72	nw.
Do	30	60	w.	Do	7	65	nw.
Duluth, Minn	7	51	nw.	Syracuse, N. Y	11	64	s.
Fort Smith, Ark	7	50	nw.	Do	30	50	sw.
Hannibal, Mo	7	52	nw.	Tatooosh Island, Wash	6	71	e.
Harrisburg, Pa	30	53	w.	Do	7	72	e.
Hatteras, N. C	8	60	w.	Do	10	52	e.
Huron, S. D	6	72	nw.	Do	13	50	ne.
Do	7	52	nw.	Do	18	50	s.
Independence, Cal	25	75	w.	Do	19	50	sw.
Jacksonville, Fla	7	57	sw.	Do	20	62	s.
Lincoln, Nebr	6	60	nw.	Do	23	64	sw.
Do	7	58	nw.	Do	24	64	w.
Mount Tamalpais, Cal	18	51	nw.	Do	25	50	nw.
Do	24	57	sw.	Do	29	52	sw.
Do	25	86	nw.	Valentine, Nebr	6	57	nw.
Do	26	57	s.	Do	7	60	nw.
Do	27	51	sw.	Williston, N. Dak	6	66	uw.
New York, N. Y	3	56	w.	Do	19	50	nw.
Do	12	62	w.	Winnemucca, Nev	26	61	sw.
Do	30	60	w.	Yankton, S. Dak	6	50	nw.
Do	31	52	w.	Do	7	50	nw.

MONTHLY WEATHER REVIEW.

JANUARY, 1903

TABLE I.—Climatological data for Weather Bureau Stations, January, 1903.

Stations.	Elevation of instruments.		Pressure, in inches.		Temperature of the air, in degrees Fahrenheit.						Precipitation, in inches.		Wind.																					
	Barometer above sea level, feet.		Thermometers above ground.		Actual, reduced to mean of 24 hours.		Sea level, reduced to mean of 24 hrs.		Departure from normal.		Mean maximum, + mean minimum, + 2.		Departure from normal.		Mean maximum.		Minimum.		Greatest daily range.		Mean wet thermometer.		Departure from normal.		Total movement, miles.		Maximum velocity.							
	Thermometer above ground.		Anerometer above ground.		Sea level, reduced to mean of 24 hrs.		Departure from normal.		Mean maximum.		Maximum.		Date.		Mean minimum.		Minimum.		Greatest daily range.		Mean temperature of the dew-point.		Mean relative humidity, per cent.		Total.		Days with 0.1 or more.		Miles per hour.		Direction.		Date.	
New England.																																		
Eastport	76	69	74	29.72	29.81	—	.19	25.9	+ 0.9	21.2	+ 0.8	23.0	+ 0.5	43	1	21	28	— 14	19	14	40	73	3.65	— 0.3	0.1	12	9,646	w.	40	s.	12	9	12	5.5
Portland, Me.	103	81	117	29.74	29.87	—	.18	23.0	+ 0.5	43	1	30	— 9	19	16	35	20	14	71	9	7	9,096	sw.	36	w.	31	15	8	4	412.3				
Concord	298	70	79	29.56	29.90	—	.15	21.8	+ 0.8	43	1	30	— 15	20	13	42	—	—	—	—	—	3.61	+ 0.3	11	4,631	n.w.	33	w.	31	11	10	5.4	10.2	
Northfield	876	16	60	28.91	29.90	—	.15	16.6	+ 1.1	44	1	27	— 19	20	6	41	14	10	76	2,21	— 0.5	12	6,128	s.	36	sw.	12	4	14	13	6.5	17.7		
Boston	125	115	181	29.76	29.91	—	.14	28.6	+ 1.6	50	1	36	— 1	19	21	33	26	20	69	3.43	— 0.7	10	9,280	w.	48	c.	3	14	8	5.4	4.2			
Nantucket	12	43	85	29.90	29.91	—	.13	31.6	+ 0.2	52	21	38	— 4	19	26	27	29	25	76	3.02	+ 0.7	14	12,403	w.	49	se.	3	8	8	15	6.5	10.9		
Block Island	31	11	60	29.91	29.95	—	.12	31.4	+ 0.3	51	21	38	— 5	19	25	32	29	24	74	4.42	+ 0.2	10	15,248	w.	56	w.	31	13	8	10	5.1	3.6		
Narragansett																																		
New Haven	106	117	140	29.83	29.95	—	.13	29.2	+ 1.7	49	2	37	— 4	19	22	33	26	20	71	3.17	— 1.1	10	7,575	n.	38	w.	31	15	6	10	4.7	8.3		
Mid. Atlantic States.																																		
Albany	97	102	115	29.84	29.95	—	.12	24.2	+ 1.0	43	29	32	— 4	19	17	33	22	19	83	1.83	— 1.1	11	5,377	s.	27	w.	31	5	8	18	7.1	4.8		
Binghamton	875	79	98	29.88	29.94	—	.14	24.3	+ 1.9	43	30	32	— 24	17	33	28	28	22	72	3.44	— 0.5	12	5,734	w.	31	w.	30	4	9	18	7.2	16.3		
New York.	314	108	350	29.62	29.97	—	.13	30.6	+ 0.1	51	28	37	— 8	13	24	28	28	22	70	3.67	— 0.6	12	12,958	w.	62	w.	30	6	8	17	6.9	12.1		
Harrisburg	374	94	104	29.59	30.01	—	.09	28.6	+ 1.7	46	28	35	— 6	13	22	30	26	21	75	3.67	— 0.9	10	6,511	w.	53	w.	30	3	10	12	5.7	3.9		
Philadelphia	117	168	184	29.87	30.01	—	.10	32.6	+ 0.6	52	30	39	— 10	13	26	26	29	24	73	3.52	+ 0.1	12	8,115	w.	36	n.w.	30	9	10	12	5.7	3.9		
Syracuse	805	111	119	29.08	29.97	—	.12	26.6	+ 0.7	49	29	34	— 4	13	19	29	24	18	69	2.73	— 1.3	12	6,521	sw.	38	w.	30	4	7	20	7.5	5.2		
Atlantic City	52	39	48	29.94	30.01	—	.10	33.6	+ 1.1	57	28	41	— 10	13	26	27	30	26	77	3.93	+ 0.1	11	6,876	n.w.	34	sw.	11	9	13	5	6.9	6.9		
Cape May	17	47	51	30.02	30.03	—	.09	34.6	+ 0.2	55	3	41	— 14	19	25	27	32	22	70	4.45	+ 0.6	11	7,231	n.w.	34	w.	12	8	11	12	5.8	4.0		
Baltimore	123	69	117	29.87	30.01	—	.11	33.6	+ 0.4	57	28	40	— 12	13	27	25	29	24	73	3.81	+ 0.7	12	6,410	w.	42	w.	30	10	5	17	6.5	6.5		
Washington	112	59	76	29.90	30.03	—	.10	33.4	+ 0.2	58	28	41	— 11	13	26	26	30	25	75	4.26	+ 0.8	13	5,555	n.w.	36	n.w.	30	10	5	16	6.1	2.2		
Cape Henry	18	5	58	30.00	30.02	—	.11	40.6	+ 0.4	66	3	48	— 20	9	34	25	25	25	75	1.93	+ 2.3	10	16,541	sw.	42	n.w.	8	7	10	14	6.3	3.6		
Lynchburg	861	83	88	29.26	30.02	—	.11	36.6	+ 0.2	62	29	40	— 15	13	28	30	32	28	75	5.31	+ 1.4	13	3,795	w.	26	n.w.	9	10	11	12	5.8	1.6		
Norfolk	91	102	111	29.93	30.03	—	.10	41.2	+ 0.8	66	3	49	— 20	13	33	28	37	33	76	1.94	+ 1.9	11	7,300	w.	37	s.	11	9	11	12	5.7	T.		
Richmond	144	82	90	29.88	30.05	—	.08	38.2	+ 0.4	68	24	46	— 17	13	30	35	30	25	86	3.61	— 1.1	12	4,551	w.	25	w.	30	8	12	13	5.8	0.9		
Wytheville	2,293	40	47	27.57	30.03	—	.11	32.2	+ 0.2	62	29	40	— 8	9	24	31	28	26	84	3.21	— 1.1	13	5,572	w.	32	w.	30	10	7	14	5.7	8.4		
S. Atlantic States.																																		
Asheville	2,255	73	100	27.65	30.04	—	.11	36.4	+ 0.5	63	29	45	— 11	13	27	35	32	28	78	1.61	— 0.7	10	7,704	u.	44	n.w.	30	11	8	12	5.4	0.8		
Charlotte	773	68	76	29.19	30.05	—	.10	39.8	+ 1.4	66	29	47	— 18	13	32	35	30	26	72	3.10	+ 2.0	11	5,734	sw.	33	n.w.	8	10	7	14	6.1	6.1		
Hatteras	11	12	47	30.02	30.03	—	.11	45.7	0.0	67	*	51	24	30	43	40	31	88	2.60	+ 3.8	12	11,728	w.	60	w.	8	12	6	13	6.4	6.4			
Kittyhawk																																		
Raleigh	376	93	101	29.62	30.05	—	.08	40.6	+ 0.2	67	29	50	— 18	9	32	30	36	31	73	3.04	+ 0.6	11	10,093	sw.	.....	.....	30	9	8	13	6.1	6.1
Wilmington	78	82	90	29.95	30.03	—	.11	46.2	+ 0.7	70	30	55	— 22	9	37	28	41	37	76	3.43	+ 0.5	12	6,395	w.	38	n.w.	30	9	7	14	10	5.9		
Charleston	48	14	92	30.02	30.07	—	.08	48.5	+ 1.5	74	29	56	— 23	13	41	26	44	42	88	5.17	+ 1.2	14	7,749	w.	35	n.w.	30	9	2	17	12	6.5		
Columbia	351	114	122	29.68	30.07	—	.08	44.0	+ 1.6	70	29	52	— 21	13	36	28	40	36	78	3.06	+ 0.7	11	6,877	sw.	38	n.w.	7	9	7	15	6.5	6.5		
Augusta	180	89	97	29.88	30.07	—	.09	44.8	+ 1.8	71	29	53	— 22	13	37	33	40	35	73	3.41	+ 1.1	12	5,113	w.	30	n.w.	12	12	8	11	5.6	5.6		
Savannah	65	79	89	30.00	30.07	—	.08	49.8	+ 1.2	72	29	58	— 23	13	42	34	44	76	3.64	+ 0.4	11	5,906	w.	34	w.	7	11	5	16	6.7	6.7			
Jacksonville	43	101	129	30.01	30.06	—	.09	41.6	+ 0.9	69	29	48	— 18	13	35	28	36	32	74	1.96	+ 3.8	12	10,412	n.w.	48	n.w.	30	7	8	16	6.5	T.		
Atlanta	1,174	190	216	28.81	30.07	—	.08	45.0	—	70	29	53	— 22	13	37	31	39	42	72	2.95	+ 1.6	9	5,387	se.	31	n.w.	29	14	5	12	5.1	5.2		
Macon	370	93	99	29.68	30.08	—	.08	40.6	+ 4.5	72	29	49	— 16	12	32	31	36	31	73	1.52	+ 0.8	9	6,682	e.	50	n.w.	29	10	11	15	5.2	0.5		
Pens																																		

TABLE I.—Climatological data for Weather Bureau Stations, January, 1903—Continued.

Stations.	Elevation of instruments.		Pressure, in inches.				Temperature of the air, in degrees Fahrenheit.						Precipitation, in inches.			Wind.																	
	Barometer above sea level, feet.		Thermometers above ground.		Anemometer above ground.		Actual, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hrs.	Departure from normal.	Mean max. + mean min. + 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Total.	Departure from normal.	Lays with 01, or more.	Total movement, miles.	Precipitation direction.	Miles per hour.	Maximum velocity.	Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.
<i>North Dakota.</i>																																	
Moorhead.....	936	54	60	28.94	30.02	—	.12	9.0	+ 9.2	40	6	18	—22	30	0	43	8	78	0.80	+ 0.2	10	8,811	n.w.	40	n.w.	6	11	5.5	3	11.8			
Bismarck.....	1,674	16	29	28.17	30.04	—	.09	14.2	+ 9.7	50	6	25	—29	30	3	42	10	2	62	0.82	+ 0.3	6	7,680	n.w.	63	n.w.	6	6	4.9	5.5	8.2		
Williston.....	1,885	14	44	27.91	29.98	—	.13	11.9	+ 8.0	42	6	23	—21	29	1	45	10	6	78	0.40	+ 0.2	7	6,611	n.w.	66	n.w.	6	10	5.5	8.2			
<i>Upper Miss. Valley.</i>																																	
Minneapolis.....	....	99	208	....	....			14.6	+ 2.7	40	31	24	—14	11	6	38	....	....	0.22	+ 0.6	7	9,036	n.w.	40	D.W.	....	9	14	....	4.2
St. Paul.....	837	102	122	29.02	29.98	—	.13	15.0	+ 4.4	38	26	23	—13	11	6	36	13	10	82	0.27	+ 0.7	9	6,399	n.w.	35	D.W.	6	6	6.3	2.7			
La Crosse.....	714	71	87	29.19	30.00	—	.11	17.8	+ 3.1	43	31	26	—8	12	10	37	....	....	0.20	+ 1.1	9	5,681	n.w.	38	D.W.	7	7	5.5	1.6		
Davenport.....	606	71	79	29.31	29.98	—	.14	24.9	+ 4.9	49	1	32	—2	12	18	28	22	20	84	0.79	+ 0.9	6	5,252	w.	34	w.	7	7	5.9	5.1			
Des Moines.....	861	84	88	29.08	30.04	—	.10	25.4	+ 7.9	49	31	34	—3	11	17	35	23	19	80	0.20	+ 1.1	5	6,511	u.w.	48	D.W.	7	7	12	5.7			
Dubuque.....	698	100	117	29.20	29.99	—	.13	22.4	+ 5.1	45	31	30	—5	12	15	27	19	16	78	0.17	+ 1.5	7	5,711	n.w.	35	D.W.	7	7	6.8	1.5			
Keokuk.....	614	63	78	29.32	30.02	—	.12	26.5	+ 3.3	51	26	33	—5	12	20	27	24	21	82	0.77	+ 1.0	10	6,476	s.w.	40	D.W.	7	7	5.4	8.0			
Cairo.....	356	87	93	29.68	30.07	—	.09	36.6	+ 1.9	70	29	44	—10	10	30	35	33	29	78	2.35	+ 1.5	12	7,361	s.	35	D.W.	7	7	7	2.4			
Springfield, Ill.....	644	92	93	29.31	30.02	—	.11	27.2	+ 1.7	59	28	35	—6	12	20	29	25	22	85	1.44	+ 0.6	11	7,835	n.w.	40	D.W.	7	7	5.8	11.9			
Hannibal.....	554	75	110	29.42	30.01	—	.12	28.6	+ 2.7	61	28	36	—4	12	21	31	29	27	73	1.98	+ 0.3	10	7,488	n.w.	52	D.W.	7	7	6.1	15.8			
St. Louis.....	567	111	210	29.40	30.02	—	.12	33.7	+ 3.2	64	26	21	—3	12	27	31	30	25	73	1.76	+ 0.4	7	8,541	s.	52	w.	7	7	11	5.1			
<i>Missouri Valley.</i>																																	
Columbia.....	784	11	84	29.16	30.03	—	.10	30.6	0.0	66	28	39	—3	12	22	35	....	....	1.90	+ 0.4	10	7,191	w.	47	D.W.	7	7	12	5.8		
Kansas City.....	963	78	95	29.00	30.07	—	.08	31.6	+ 6.2	55	26	39	0	12	24	29	28	24	75	0.50	+ 0.7	5	6,971	n.w.	41	D.W.	7	7	10	5.1			
Springfield, Mo.....	1,324	98	104	28.60	30.04	—	.10	33.9	+ 1.6	55	28	42	—2	12	26	36	30	27	80	1.32	+ 1.2	10	8,763	n.w.	41	D.W.	7	7	16	2.3			
Topeka.....	....	81	89	....	....			31.2	+ 4.4	58	6	39	—9	12	23	35	....	....	0.44	+ 0.5	5	7,228	n.w.	43	D.W.	7	7	11	5.5	
Lincoln.....	1,189	75	84	28.71	30.02	—	.13	27.4	+ 9.7	53	15	36	—1	12	19	29	24	20	77	0.25	+ 0.4	4	8,465	n.w.	60	D.W.	6	6	17	7			
Omaha.....	1,105	115	121	28.81	30.04	—	.11	27.1	+ 7.9	51	15	35	—3	12	19	29	19	17	76	0.07	+ 0.6	5	7,316	n.w.	52	D.W.	7	7	9	12			
Valentine.....	2,598	47	54	27.18	30.00	—	.12	23.2	+ 6.3	51	25	35	—12	12	11	42	20	17	82	0.22	+ 0.4	4	8,584	n.w.	60	D.W.	7	7	19	8			
Sioux City.....	1,135	96	164	28.76	30.04	—	.11	22.8	+ 6.5	51	6	31	—6	12	14	37	....	....	0.06	+ 0.6	4	9,310	s.w.	72	D.W.	6	6	11	5.3		
Pierre.....	1,572	43	50	28.29	30.03	—	.10	19.4	+ 6.7	50	6	28	—9	12	11	37	17	13	78	0.26	+ 0.2	6	5,521	se.	42	D.W.	6	6	13	4.7			
Huron.....	1,306	56	67	28.56	30.03	—	.13	13.4	+ 6.4	45	6	24	—17	12	3	36	12	9	81	0.08	+ 0.4	5	9,187	n.w.	72	D.W.	6	6	11	8.0			
Yankton.....	1,238	42	49	28.66	30.03	—	.13	21.7	+ 7.5	49	6	31	—9	12	12	36	....	....	0.17	+ 0.4	4	5,695	n.w.	50	D.W.	7	7	16	5.5		
<i>Northern Slope.</i>																																	
Havre.....	2,505	46	63	27.27	30.01	—	.09	21.6	+ 11.9	51	6	33	—11	29	10	40	19	16	81	0.33	+ 0.6	5	8,210	w.	48	s.w.	6	6	17	5.7			
Miles City.....	2,371	42	50	27.40	29.99	—	.13	24.0	+ 13.4	50	6	33	—8	29	15	36	21	19	86	0.19	+ 0.4	4	4,474	s.	40	D.W.	6	6	15	3.8			
Helena.....	4,110	88	94	25.74	30.05	—	.08	33.6	+ 5.1	55	26	39	—1	27	22	38	25	21	67	0.69	+ 0.7	6	5,284	s.w.	30	D.W.	3	3	10	11			
Kalispell.....	2,965	45	51	26.91	30.06	—	.06	27.6	....	59	6	34	—4	28	22	31	26	22	81	0.91	....	12	3,117	w.	30	D.W.	3	3	25	4.4	
Rapid City.....	3,234	46	50	26.51	29.98	—	.12	23.8	+ 8.7	58	6	41	—5	12	17	52	24	20	73	0.23	+ 0.1	5	6,141	n.w.	44	D.W.	6	6	16	10			
Cheyenne.....	6,088	56	64	23.90	30.04	—	.01	29.4	+ 4.4	53	23	40	0	11	19	38	23	19	76	0.20	+ 0.2	6	10,686	n.w.	55	D.W.	6	6	12	7			
Lander.....	5,372	26	36	24.58	30.11	—	.01	23.0	+ 3.1	59	5	38	—15	11	8	39	18	14	74	0.25	+ 0.1	4	2,630	s.w.	30	D.W.	6	6	9	15			
North Platte.....	2,821	43	52	27.03	30.03	—	.07	38.6	+ 1.6	50	28	48	13	11	29	38	34	29	74	0.27	+ 1.2	7	8,391	n.	40	n.	7	7	10	9			
<i>Middle Slope.</i>																																	
Denver.....	5,291	79	151	24.64	30.00	—	.05	34.8	+ 6.6	66	6	46	9	12	23	41	27	17	74	0.12	+ 0.4	3	6,735	s.	45	n.w.	6	6	15	4.4			
Pueblo.....	4,685	80	86	25.23	30.02	—	.03	33.8	+ 5.1	68	6	48	2	12	20	42	17	55	0.23	+ 0.4	4	5,060	n.w.	49	D.W.	24	10	17	4.3				
Concordia.....	1,398	42	47	28.53	30.06	—	.08	30.7	+ 7.5	55	* 39	1	27	23	32	26	22	76	0.27	+ 0.4	5	5,414	s.	38	D.W.	7	7	16	5.7				
Dodge.....	2,509	44	54	27.39	30.06	—	.05	33.4	+ 6.8	60	6	47	5	11	20	43	27	25	75	0.08	+ 0.4	4	7,703	s.	36	D.W.	7	7	9	5.6			
Wichita.....	1,358	78	86	28.59	30.07	—	.06	34.8	+ 4.2	65	5	24	5	12	25	36	30	25	73	0.08	+ 0.8	5	6,987	s.	41	n.w.	7	7	14	9			
Oklahoma.....	1,214	79																															

TABLE II.—*Climatological record of voluntary and other cooperating observers, January, 1903.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>Alabama.</i>																	
Ashville.	°	°	°	In.	In.	Arizona—Cont'd.	°	°	°	In.	In.	California—Cont'd.	°	°	°	In.	In.
Benton.	75	17	41.8	2.68		Prescott.	65	10	35.6	0.74		Crescent City L. H.	58	16	37.7	17.88	
Birmingham.	75	20	45.6	2.90		San Simon.	73	20	43.7	T.		Cuyamaca.	58	16	37.7	3.96	
Bridgeport.						Sentinel*1.	70	39	53.6	0.00		Delano*1.	67	28	46.4	1.05	
Burkeville.						Showlow.				T.		Delta*1.	72	32	46.0	11.86	4.0
Calera.						Signal.	80°	23°	49.3°	0.14		Drytown.	61	26	42.6	6.30	
Camphill.	76	18	44.8	3.00		Superstition.	60	8	32.9	0.13		Dunnigan*1.	62	28	44.2	3.93	
Citronelle.	76	22	49.6	3.92		Taylor.	68	23	45.3	0.15		Durham*5.	62	29	43.0	3.73	
Cordova.	81	14	42.6	4.33		Tuba.	58	10	34.5	0.00		East Brother L. H.				3.70	
Daphne.	74°	23°	50.5°	5.61		Tucson.	76	27	48.9	0.00		El Cajon.	84	31	53.3	0.84	
Decatur.	77	19	45.4	3.52		Vail*5.	78	35	53.9	0.00		Elmdale.	67	25	43.4	2.84	
Demopolis.						Walnut Grove.	68	25	45.0	0.21		Elsinore.	87	28	53.6	0.81	
Dothan.	74	23	49.2	4.25		Willcox*1.						Escondido.	78	25	49.6	1.58	
Eufaula.	75	20	46.0	4.11		Yarnell.						Fallbrook.	82	33	53.2	3.11	
Eutaw.	72	20	45.5	3.98								Folsom*1.	65	28	45.0	5.23	
Evergreen.	74	20	46.9	3.20								Fordyce Dam.				11.51	80.0
Flomaton.	76	18	48.6	4.25								Fort Bragg.				8.54	
Florence a.				5.04								Fort Ross.	68	36	48.4	9.85	
Florence b.	76	15	41.6	5.11								Foster.				2.13	
Fort Deposit.	74	21	44.1	3.00								Georgetown.	71	22	45.0	14.77	6.0
Gadsden.	76	18	42.0	3.86								Geyserville.	53	30	40.8	4.85	
Goodwater.	74	17	41.4	3.33								Gilroy (near).	68	21	48.0	2.87	
Greensboro.	75	23	46.4	3.50								Glendora.				3.87	
Greenville.				3.20								Greenville.	56	10	34.5	7.44	36.0
Hamilton.	76	10	41.7	4.45								Hanford.	69	18	40.8	1.31	
Helena.				4.29								Healdsburg.	61	28	45.4	7.55	
Highland Home.	76	20	47.3	2.17								Hollister.	68	23	47.6	2.78	
Letohatchie.				2.90								Humboldt L. H.				16.33	
Livingston a.	20			3.96								Idylwild.				3.82	
Lock No. 4.	63	17	39.2	3.57								Imperial.	83	32	56.4	T.	
Madison Station.	77	15	42.8	3.09								Indio*1.	90	37	58.2	0.00	
Maplegrove.	74	16	39.4	3.11								Iowa Hill*1.	69	29	46.4	12.54	4.0
Marion.	74	20	43.0	3.74								Irvine.	86	32	57.8	1.42	T.
Milstead.				2.51								Jackson.	72	29	45.8	9.12	
Newbern.	77	19	46.4	3.70								Jamesstown.	67	25	44.0	11.19	T.
Newburg.	79	13	41.4	4.40								Jolon.				2.34	
Notasulga.				2.44								Kennedy Gold Mine.	58	24	40.0	11.78	
Oneonta.	73	15	41.7	2.85								Kent.	64	28	46.0	10.51	
Opelika.	71	20	42.5	3.36								Kernville.				2.05	
Oxanna.	73	17	43.0	0.11								King City.	79	24	49.3	1.19	
Ozark.	75	20	45.1	4.26								Lakeport (near).	56	30	44.8	5.37	
Prattville.	84	14	46.0	3.24								Lanesa.				1.10	
Pushmataha.	76	18	46.0	5.15								Laporte*1.	59	11	35.1	16.42	62.3
Riverton.	77	10	38.4	4.62								Lemoncove.	70	26	45.1	2.22	
Scottsboro.	73	15	38.8	2.93								Lick Observatory.	68	24	43.7	8.86	10.0
Selma.	75	20	44.2	2.42								Line Point L. H.				3.62	
Talladega.	75	17	44.1	2.56								Livermore.	67	23	47.4	3.19	
Tallassee.				2.92								Lodi.	65	27	44.6	3.21	
Thomasville.	75	20	44.3	3.70								Los Gatos.	63	31	47.0	5.93	
Tuscaloosa.	77	19	42.5	3.81								Mammoth*1.	78	31	60.1	0.00	
Tuscumbia.	74	16	39.8	5.02								Manzana.	67	23	46.2	0.60	
Tuskegee.	76	20	47.3	2.36								Mare Island L. H.				3.30	
Union Springs.	74	24	45.1	3.60								Meadow Valley.	56	12	34.9	9.48	62.0
Uniontown.	75	19	46.2	3.14								Merced.	65	25	41.4	2.24	
Valleyhead.	72	13	40.6	3.04								Mercury.	66	34	51.2	9.28	
Verdens.				3.54								Mills College.				5.68	
Wetumpka.	78	20	42.4	3.01								Milo.				5.38	
<i>Alaska.</i>												Milton (near).	60	28	43.4	4.52	
Copper Center.	49	-55	-8.6									Modesto*1.	65	29	47.2	2.34	
Fort Eghert.	41	-61	-19.3	0.58	6.5							Mohave*1.	66	25	46.5	0.02	
Fort Liscom.	36	-10	16.2	10.42	108.0							Mokelumne Hill*3.	31	41.2	7.89		
Killisnoo.	41	4	27.1	4.05	25.5							Montereo.	74	26	48.4	1.94	
Orca.				16.74	57.0							Monterey*1.	65	32	49.2	3.43	
Sitka.	54	10	33.8	6.61	19.0							Mount St. Helena.				12.07	5.0
Skagway.	47	-17	19.6	2.08	5.2							Mt. Baldy Flat.				2.50	4.0
<i>Arizona.</i>												Napa.	62	29	45.0	3.22	
Aqua Caliente.	78	27	51.8	T.								Nebraska.	75	21	43.7	10.62	8.0
Allaire Ranch.				0.04								Newcastle.	59	25	42.4	8.88	
Arizona Canal Co's Dam.	74	33	54.4	0.18								Newhall*5.	30	24	51.8	1.13	
Aztec.	78	35	56.6	0.10								Newman.	66	24	42.4	1.47	
Bisbee.	70	21	45.8	0.30								Niles.	64	29	47.8	4.26	
Bowie.	66	26	46.5	0.05								North Bloomfield.	72	18	43.2	12.72	19.0
Buckeye.	76	28	49.8	0.00								North San Juan*1.	62	24	42.5	12.88	3.0
Casagrande.	77			0.00								Oakland.	62	32	47.5	4.02	
Champie Camp.	81	23	49.4	T.								Ogilby*5.	82	48	46.6	0.00	
Cochise*1.	76	28	50.7	T.								Ontario.	81	33	53.3	1.34	
Congress.	72	37	52.0	0.23								Orland*1.	63	28	45.2	2.27	
Dragoon Summit*1.	52	26	37.2	0.00								Palermo.	59	25	41.7	6.62	
Dudleyville.	78	22	48.2	1.04								Paso Robles.	68	19	44.8	2.19	
Duncan.	72	15	41.7	0.04	0.5							Peachland*6.	59	32	46.6	9.36	
Fort Apache.	67	11	37.8	0.20	2.0							Piedras Blancas L. H.				3.20	
Fort Defiance.	48	-2	24.8	0.42	4.2							Pigeon Point L. H.				3.86	
Fort Grant.	67	26	46.0	T.								Pilot Creek.	79	42	58.6	3.13	
Fort Huachuca.	69	30	47.0	0.44	0.4							Pine Crest.	62	23	42.1	9.33	
Globe.	70	23	46.4	0.00								Placerville.				4.62	
Jerome.	66	29	43.2	0.50	T.							Point Ano Nuevo L. H.				7.35	
Maricopa.	73	28	48.0	0.00								Point Arena L. H.				8.08	
Mesa.	79	29	51.4	T.								Point Bonita L. H.				1.05	
Mesa (near).	78	27	49.2	0.00								Point Conception L. H.				1.69	

TABLE II.—Climatological record of voluntary and other cooperating observers—Continued.

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
California—Cont'd.	°	°	°	Ins.	Ins.	Holyoke (near)	°	°	°	Ins.	Ins.	Florida—Cont'd.	°	°	°	Ins.	Ins.
Quincy	54	10	34.4	9.31	33.0	Husted	63	0	30.1	0.05	1.5	Merritt Island	80	37	60.8	4.56	
Ranch House	86	36	57.0	1.54	T.	Lake Moraine	64	-2	29.2	0.03	1.2	Miami	83	36	50.0	4.99	
Redding	70	27	44.4	10.14	T.	Lamar	42	-5	21.6	0.45	5.2	Molini	77	20	50.0	5.45	
Redlands	85	33	53.0	1.16		Las Animas	72	8	36.2	0.04	0.5	New Smyrna	81	27	58.6	4.10	
Reedley	68	25	44.8	2.16		Lay	70	4	32.4	0.00	1.0	Nocatee	87	31	63.6	4.65	
Repressa	68	28	44.2	5.77		Leadville (near)	46	-23	17.0	1.03	18.5	Ocata	82	25	56.6	6.52	
Rivista	64	28	44.4	2.86		Leroy	58	2	29.8	0.18	3.0	Orange City	83	25	61.0	5.01	
Riverside	84	27	52.0	0.94		Long Peak	48	-7	24.8	0.22	5.0	Orlando	80	34	60.2	5.69	
Roe Island L. H.				3.20		Mancos	50	-1	25.2	0.42	4.8	Pine mount	80	23	51.0	4.59	
Rohnerville *5	60	28	46.8	14.34		Marshall Pass						Rockwell	79	22	56.4	3.95	
Rosewood	70	23	43.2	4.79	1.00	Meeker	45	-15	19.8	0.77	11.5	St. Andrews	71	21	50.4	5.56	
Sacramento	62	29	44.7	3.81		Moraine	52	3	26.8	0.12	2.0	St. Augustine	83	29	55.4	4.47	
Salinas	75	29	50.2	3.14		Pagoda	50	-12	21.8	0.99	18.0	St. Leo	83	31	60.0	7.37	
Salton *1	83	34	58.3	0.00		Parachute	48	-6	23.7	0.50	8.5	Stephensville	80	22	51.8	3.36	
San Bernardino	85	27	52.6	1.96		Rangely	26					Sumner	76	28	54.8	4.57	
San Jacinto	89	27	50.7	1.32		Rockyford	70	5	34.6	T.	T.	Switzerland	76	28	54.0	4.87	
San Jose	69	29	48.8	2.74		Rogers Mesa	44	-4	20.7	0.70	5.5	Tallahassee	73	26	51.4	3.28	
San Leandro	65	30	46.5	4.89		Ruby						Tarpon Springs	81	30	59.8	5.23	
San Luis L. H.				2.39		Russell	46	-22	15.0	0.43	4.5	Waukeenah	74	24	50.9	3.61	
San Mateo *1	62	38	49.1	6.30		Saguache	42	-11	17.3	0.15	2.5	Waussau	74	18	50.8	4.66	
San Miguel *1	69	23	47.4	1.27		Salida	56	-2	28.2	T.	T.	Wewahitchka	75	24	52.0	4.99	
Santa Barbara	80	37	56.4	2.06		San Luis	49	-17	17.7	0.03	0.5	Georgia					
Santa Barbara L. H.				1.80		Santa Clara	55	-1	29.4	0.40	9.0	Adairsville	71	18	41.2	2.79	
Santa Clara				2.49		Silt	45	2	25.1	0.71	10.5	Albany	72	26	48.2	4.09	
Santa Clara College	69	26	47.8	3.09		Sugarloaf	59	0	29.8	0.15	2.0	Alpharetta	72	16	41.4	2.75	
Santa Cruz	77	30	49.4	6.25		Tulluride	47	-5	19.4	2.19	34.8	Americus	70	20	44.5	4.00	
Santa Cruz L. H.				4.86		Trinidad	64	8	35.0	T.	0.0	Athens	66	19	40.9	3.11	
Santa Maria	80	32	54.8	1.80		Twinklakes						Blakely	75	21	46.7	3.86	
Santa Monica	80	36	54.9	1.14		Vilas	51	-26	13.0	0.22	3.5	Bowersville	67	17	40.2	4.26	
Santa Paula	85	34	61.6	1.66		Wagon Wheel	51	-26	13.0	T.	T.	Brent	70	17	43.2	2.75	
Santa Rosa	60	27	45.6	6.38		Wallet						Butler					
Sausalito				17.47		Waterdale	65	-1	32.4	0.18	2.0	Camak	69	19	41.6	2.77	
Shasta	71	30	47.6	17.24	2.0	Westcliffe	50	-1	25.4	0.34	4.3	Canton					
Sierra Madre	77	39	55.2	4.84		Whitepine	35	-13	12.2	1.24	22.6	Carlton					
Snedden				0.59		Wray	67	4	32.1	0.25	3.0	Clayton	67	12	39.4	4.73	
Sonoma				5.46		Yuma						Columbus	75	23	47.9	3.55	
S. E. Farallone L. H.				2.99		Connecticut						Coney	75	18	47.9	3.08	
Stockton	63	25	42.8	2.50		Bridgeport	48	4	28.9	4.28	7.5	Covington	69	18	41.2	2.38	
Storey	71	25	45.6	1.55		Canton	50	-9	23.5	4.10	11.0	Dahlonega	67	14	38.9	4.60	
Summerdale	71	15	41.4	14.13	30.0	Colchester	51	0	28.8	3.83	6.0	Diamond	70	11	38.1	3.00	5.0
Summit *1	48	9	30.9	10.50	85.0	Gaylordsville						Douglas	78	25	50.6	3.85	
Susanville	52	6	31.8	3.71	31.0	Hartford	45	0	26.5	3.70	5.0	Dublin					
Tehama *1	60	30	47.0	2.40		Hawleyville	47	0	26.6	4.39	12.0	Dudley	73	23	46.8	3.76	
Tejon Ranch	71	30	47.2	2.19		Lake Konomoc						Eastman					
Trimmer				5.83		New London	48	4	28.0	2.94	17.5	Eatonton	70	19	44.4	2.48	
Trinidad L. H.				17.91		North Grosvenor Dale	52	-2	25.0	3.93		Elberton	66	18	41.8	3.37	
Truckee *1	50	-8	27.7	8.00	80.0	Norwalk	48	2	27.8	4.45	7.0	Experiment	69	18	42.5	1.67	
Tulare b				1.26		Southington	47	-2	26.8	3.80	6.0	Fitzgerald	74	19	48.2	3.23	
Tulare c	74	24	45.5	1.60		South Manchester						Fleming	87	21	50.1	3.68	
Tustin	84	42	59.2	1.49		Storrs	47	-10	26.2	3.79	4.5	Fort Gaines	73	23	46.4	4.02	
Ukiah	63	24	45.9	7.26	0.5	Voluntown	52	-3	28.6	4.84	4.5	Gainesville	66	16	33.5	4.09	
Upland	80	33	52.5	3.97		Waterbury	49	-2	26.9	3.78	10.5	Gillsville	69	17	42.1	2.26	
Upper lake	68	24	43.3	6.23		West Simsbury						Greensboro	69	18	41.2	2.50	
Upper Mattole *1	60	34	46.2	23.05		Delaware						Griffin	69	19	41.8	2.12	
Vacaville *1	62	28	44.2	4.95		Delaware City						Harrison	72	22	46.9	4.20	
Ventura	85	40	58.7	0.88		Milford						Hawkinsville	73	21	45.4	2.78	
Visalia	69	22	43.5	1.77		Millsboro	59	12	35.4	3.35	3.0	Hephzibah	71	20	45.6	3.15	
Volcano Springs *1	80	38	61.5	0.00		Newark	60	12	34.4	4.39	5.3	Jesup	80	24	49.8	3.69	
Wasco	75	28	42.4	1.40		Seaford	50	8	30.2	4.29	5.0	Lost Mountain	78	15	42.2*	2.56	
West Point				1.17		District of Columbia						Louisville	72	22	46.5	2.52	
West Saticoy				1.17		Distributing Reservoir *6	54	11	33.1	4.10		Lumpkin	74	18	46.4	3.33	
Wheatland	60	27	42.5	6.31		Receiving Reservoir *6	50	10	32.4	3.77		Marshallville	70	21	46.6	3.92	
Williams *1	66	35	49.1	2.10		West Washington	62	8	32.2	4.40	2.5	Mauzy	77	21	50.6	3.16	
Willits	60	28	45.3	12.36	3.0	Florida						Milledgeville	70	22	43.0	3.50	
Willow	62	27	43.1	2.48		Archer	78	24	54.6	6.21		Millen	76	19	47.6	1.34	
Yuba City *5	63	30	46.2	5.17		Avon Park	85	32	62.5	5.22		Monticello	70	19	42.8	2.22	
Zenia	73	26	44.3	17.29	18.0	Bartow	87	32	64.2	6.64		Morgan	74				
Colorado						Bonifay	74	20	51.2	3.15		Naylor	78	23	49.6	4.61	
Alford	54	7	31.6	0.10	2.5	Brooksville	82	30	58.8	4.92		Newman	69	18	40.6	2.15	
Ashcroft	43	-9	17.0	0.80	17.0	Carrabelle	73	25	54.4	5.61		Oakdale					
Blaine	73	6	36.1	T.	Clermont	82	33	60.0	5.79		Point Peter	66	22	41.8	3.44		
Boulder	67	8	37.4	0.08	2.0	De Funik Springs	80	25	59.2	4.73		Poulain	77	17	47.3	3.20	
Boxelder				0.11	1.0	Eustis	82	31	59.4	6.09		Putnam	73	19	46.4	3.21	
Breckenridge	34	-24	14.7	1.50	25.5	Federal Point	81	32	55.6	5.56		Quitman	77	24	49.8	3.40	
Buenavista				0.05	1.0	Fernandina	79	29	52.0	6.84		Ramsey	70	13	41.6	3.10	
Canyon	63	2	35.4	0.05	1.0	Flamingo	88	39	69.9	3.45		Resaca					
Castlerock	58	0	30.2	0.62	6.0	Fort George *1	71	26	52.8			Ronne	74	16	41.6	2.71	
Cedredge	51	1	24.5	0.30	4.5	Fort Meade	85	28	61.8	9.14		St. Marys	78	25	51.5	6.70	
Cheeseman	60	-4	29.4	0.14	3.3	Fort Myers	79	40	62.6	4.76		Statesboro	78	23	4		

TABLE II.—Climatological record of voluntary and other cooperating observers—Continued.

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>Idaho—Cont'd.</i>																	
Cambridge	45	-13	22.1	3.61	21.0	Sullivan	57	-9	27.0	1.16	7.8	Belknap	66	-6	26.7	1.00	5.0
Chesterfield	46	-17	18.2	2.22	22.0	Sycamore	47	-8	22.6	1.83	8.5	Belleplaine	45	-6	21.9	0.70	5.6
Dickey	42	-19	18.2			Tilden	64	-2	33.0	0.95	1.6	Bonaparte	50	-7	24.9	0.43	4.5
Forney	50	-9	23.0	2.62	20.5	Tiskiwa	48	-7	23.0	0.99	6.5	Britt	42	-10	18.7	0.39	1.5
Garnet	60	12	32.7	1.10	4.0	Tuscola	57	-8	25.6	1.71	11.2	Buckingham	56	-5	26.5	0.58	
Grangeville	54	10	31.0	2.14	15.0	Urbana	53	-12	23.8	1.04	7.5	Burlington	48	-9	23.4	T.	T.
Lake	34	-16	15.0	2.20	22.0	Walnut	47	-5	24.2	1.57	6.8	Cedar Rapids	45	-2	23.9	0.11	1.1
Lakeview	48	12	32.2	5.36	20.8	Winchester	55	-6	27.0	1.70	13.7	Chariton	51	-5	25.4	0.25	0.6
Lost River	45	-13	15.9	1.12	10.0	Winnebago	46	-9	21.2	0.58	7.0	Charles City	49	-5	20.8	T.	T.
Moscow	49	10	30.8	3.80	10.8	Zion	54	-6	22.8	0.50	5.0	Clarinda	51	-4	27.2	0.14	1.1
Murray	48	9	28.8	6.72	42.0	<i>Indiana.</i>						Clearlake	40	-12	17.8	0.25	2.5
Oakley	49	5	29.6	1.50	8.0	Anderson	61	-7	26.4	2.05	12.6	Clinton	46	-6	22.6	0.83	5.0
Paris	44	-13	15.2	2.53	25.3	Angola	53	-9	23.5	1.59	8.8	College Springs	50	-6	27.2	0.20	2.0
Payette	50	0	28.8	2.19	8.5	Auburn	56	-9	23.6	1.15		Columbus Junction	49	-4	24.5	0.28	2.7
Pollock	55	18	36.6	0.53	0.7	Avoca	64	-14	27.6	2.85	8.5	Corning	48	-5	25.7	0.07	0.8
Porthill	43	10	28.1	2.69	33.0	Bloomington	62	-4	28.8	4.44	16.0	Council Bluffs	57	-4	26.8	0.03	0.1
Priest River	44	10	28.5	5.11		Bluffton	59	-9	24.6	1.30	5.2	Cumberland					
Riddle	50	-3	24.2	2.19	12.0	Butlerville	63	-4	29.6	3.18	12.8	Danville					
Roosevelt	41	-1	21.9	3.73	35.3	Cambridge City	62	-8	23.4	2.35	11.3	Decorah	41	-8	17.8	0.31	3.0
St. Maries	49	14	32.2	5.08	18.0	Columbus	64	-8	28.7	2.44	12.0	Delaware	41	-8	19.4	0.07	1.0
Silver City	49	9	27.8	7.86	59.5	Connerville	61	-8	26.2	2.30	11.0	Denison	50	-6	23.8	0.10	1.0
Soldier	44	-18	14.6	3.33	31.3	Crawfordsville	59	-8	28.0			Dows	44	-9	20.3	0.20	1.0
Vernon	48	-11	20.2	1.87	19.2	Delphi	58	-9	22.8	2.03	11.5	Erlam	49	-5	24.6	0.03	0.2
Weston	46	2	26.0	2.36	14.4	Edwardsville*	67	1	32.9	2.80	4.5	Elkhader	47	-6	20.4	0.16	2.5
<i>Illinois.</i>						Elkhart	53	-7	23.5	1.60	12.1	Estherville	42	-10	18.2	0.09	1.0
Albion	65	-4	30.6	2.40	6.0	Fairmount	60	-9	25.2	0.83	8.0	Fayette	43	-9	19.3	0.04	0.5
Aledo	49	-5	24.5	0.73	6.0	Farmland	60	-5	25.8	2.23	13.2	Forest City	40	-10	17.9	0.10	1.0
Alexander	66	-7	26.7	1.07	9.0	Fort Wayne ¹	57	-8	26.6			Madison	45	-9	21.0	0.30	3.0
Antioch	46	-10	20.4	0.35	3.5	Franklin*	62	-4	29.5	2.42	14.5	Galva	45	-9	21.0	0.30	3.0
Ashton	47	-8	21.6	0.94	7.8	Greencastle	61	-5	27.6	1.65	12.1	Gilmantown					
Astoria	50	-5	25.7	1.36	14.0	Greensburg	61	-4	28.2	2.45	12.0	Grand Meadow	41	-10	18.4	0.40	3.3
Aurora	49	-8	23.0	0.83	5.4	Hammont	54	-5	22.4	2.23	14.0	Greene	44	-7	20.0	0.12	1.0
Benton	67	2	33.6	1.74	1.5	Hector	48	-10	24.0	2.25	12.0	Greenfield	46	-6	24.8	0.08	0.6
Bloomington	52	-8	25.6	1.31	9.4	Holland	65	0	32.0	3.89	3.0	Grinnell	45	-4	22.9	0.34	2.8
Carbridge	46	-5	23.6	0.96	9.1	Huntington	58	-8	23.2	1.71	11.5	Grinnell (near)	45	-5	22.6	0.22	2.5
Carlintonville	60	-5	29.1	1.57	11.0	Jeffersonville	65	-4	32.6	2.48	1.5	Grundy Center	45	-10	21.4	0.12	1.2
Carrollton	59	-3	28.9	1.22	7.2	Kokomo	59	-9	25.4	1.88	12.0	Guthrie Center	47	-6	24.9	T.	T.
Centralia	70	0	32.4	1.43	3.2	Lafayette	57	-8	24.8	1.82	10.9	Hampton	48	-9	20.6	0.18	1.4
Charleston	56	-6	28.2	1.68	9.1	Laporte	48	5	24.4	1.58	11.2	Hanlontown	41	-10	17.8		
Cisne	66	-2	31.2	1.68	1.5	Logansport	58	0	23.9	1.27	8.9	Harlan	47	-6	23.6	0.12	0.2
Coatsburg	56	-9	26.0	1.28	13.2	Madison a	65	0	31.0	2.44	5.2	Hopeville					
Cobden	67	3	34.8	2.26	T.	Madison b						Humboldt	44	-7	21.6	0.07	0.7
Decatur	55	-10	26.1	1.60	10.4	Marengo	67	1	31.4	3.54	3.8	Idagrove	47	-8	23.4	0.10	
Dixon	48	-7	21.2	2.76	12.5	Marion	60	-10	25.4	2.12	14.5	Independence	43	-5	20.2	0.27	2.8
Dwight	50	-2	25.0	1.55	9.5	Markle	59	-9	25.2	2.30	14.0	Indianola	48*	-4	25.8	0.09	0.5
Effingham	63	-7	28.5	2.10	7.0	Mauzy	61	-9	26.1	2.77	15.8	Iowa City	47	-3	23.8	0.67	3.0
Equality	68	-2	33.7	2.67	5.7	Moores Hill	62	-5	29.0	2.30	8.0	Iowa Falls	45	-8	19.7	0.20	0.7
Fandon	49	-6	26.0	0.88	7.8	Mount Vernon	65	-2	33.1	2.90	2.0	Jefferson	45	-5	22.7	0.27	2.0
Flora	64	-2	29.6	2.04	4.2	Northfield	59	-10	23.8	3.35	14.0	Keesauqua	50	-5	25.4	0.84	
Friendsgrove	63	-4	30.8	2.58	5.1	Sapelo	64	-1	31.0	2.64	7.5	Lacona	47	-10	21.4	0.11	1.0
Galva	47	-7	23.6	0.74	11.0	Prairie Creek	64	-9	26.2	1.32	16.0	Larrabee	47	-8	23.4	0.10	
Grafton						Princeton	65	-1	32.0	2.75	7.5	Leclaire	45	-7	22.1	0.01	T.
Greenville	61	-3	29.4	1.29	5.0	Rensselaer	55	-7	26.6	1.09	9.5	Lemars	45	-8	25.8	0.03	0.3
Griggsville	58	-5	27.4	1.30		Richmond	64	-7	28.0	1.84	7.8	Lenox	47	-7	25.3	0.03	0.3
Halfway	66	0	33.8	2.03	1.5	Rockville	60	-9	26.8	1.54	6.0	Leon	48	-5	24.6	0.31	2.4
Halliday	61	3	33.3	1.22		Salem	67	-2	31.4	3.04	7.0	Logan	48	-4	24.2	0.70	5.0
Henry	52	-7	24.9	1.20	7.0	Scottsburg	66	1	32.1	2.43	4.5	Maple Valley					
Hillsboro	60	-5	28.6	1.19	7.5	Seymour	64	-6	28.4	3.00	10.5	Maquoketa	45	-5	21.6	0.30	
Hoopston	58	-11	26.0	1.94	14.0	South Bend	52	-9	23.0	2.91	27.0	Marshalltown	47	-5	23.6	0.29	
Joliet	48	-6	22.8	1.05	5.8	Syracuse	54	-9	23.2	1.51	17.5	Monticello	45	-6	18.8	0.20	T.
Kishwaukee	47	-10	20.8	0.58	6.5	Terre Haute	64	-4	28.9	2.32	11.5	Mountay	50	-10	25.6	0.24	1.5
Knoxville	47	-9	23.8	1.10	6.0	Topeka	52	-21	23.6	0.99	8.0	Mount Pleasant	52	-5	24.2	0.15	1.0
Lagrange	49	-7	23.3	0.86	4.0	Valparaiso	49	-6	22.6	1.11		Mount Vernon	45	-5	21.9	0.29	2.7
Larharpe	48	-8	25.1	2.07	10.0	Veedersburg	58	-10	27.6	2.74	12.1	New Hampton	40	-10	17.5	0.06	T.
Lanark	44	-9	21.3	1.06	10.8	Veray	64	2	32.0	2.80	10.0	Newton	45	-8	22.6	0.65	8.0
Loami						Vincennes	66	-2	29.9	3.18	5.0	Northwood	41	-10	18.8	0.40	4.0
McLeansboro	65	1	32.4	2.21	3.8	Washington	64	-1	29.2	3.50	6.0	Odebold	45	-7	22.9	0.28	2.8
Martinton	53	-8	24.2	1.29	9.0	Winamac	56	0	28.4	2.00		Ogden	50	-12	23.7	0.18	1.6
Mascoutah	60	3	30.4	1.76	3.6	Worthington	63	-6	29.0	2.46	9.7	Olin	48	-3	22.2	0.31	3.5
Mattoon	62	2	31.0	0.99	6.6						Omaha	49	-4	24.8	0.06	0.5	
Minonk	50	-7	23.8	0.71	6.0						Osage	40	-10	18.0	0.31	3.1	
Mount Carmel	53	-7	25.4	1.18	8.5						Oscaloosa	50	-5	25.0	0.57		
Mount Pulaski	64	-2	31.5	1.66	3.7						Oskaloosa	49	-5	24.3	0.22	2.7	

TABLE II.—Climatological record of voluntary and other cooperating observers—Continued.

Stations.	Temperature, (Fahrenheit.)			Precipita-tion.		Stations.	Temperature, (Fahrenheit.)			Precipita-tion.		Stations.	Temperature, (Fahrenheit.)			Precipita-tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
Iowa—Cont'd.	°	°	°	In.	In.	Kentucky—Cont'd.	°	°	°	In.	In.	Maine—Cont'd.	°	°	°	In.	In.
Vinton #1	42	- 1	22.8	0.12	1.2	Bardstown	67	6	34.8	2.85	3.0	Mattawaukeag	°	°	°	3.57	10.0
Wapello	45 ^a	- 1°	25.6 ^c	0.65	4.5	Beattyville	67	3	34.8	2.01	2.0	Mayfield	39	- 17	17.4	5.48	17.0
Washington	49	- 7	22.3	0.38	3.5	Berea	71	7	35.6	2.85	2.2	Millinocket	47	- 19	17.7	3.34	9.0
Washta				0.05	0.5	Blandville	69	9	36.0	2.64	...	North Bridgton	47	- 23	15.8	4.20	21.5
Waterloo	44	- 5	21.5	0.17	1.3	Bowling Green	70	9	34.8	2.75	0.5	Orono	41	- 23	12.6	3.62	15.2
Waukee				0.35	3.5	Burnside	73	9	34.8	2.75	...	Patten	36	- 27	17.1	1.60	9.0
Waverly	45	- 6	20.6	0.19	1.5	Carrollton	71	10	36.2	1.95	...	Rumford Falls	42	- 16	22.0	3.51	18.4
Westbend	43	- 8	20.4	0.38	3.3	Catlettsburg	68	2	31.2	2.26	2.2	Solon	37	- 24	18.0	3.78	22.0
Westbranch				0.18	1.8	Earlington	74	7	34.9	2.48	0.2	The Forks	36	- 27	6.6	2.70	30.0
Whitten	45	- 8	21.4	0.15	1.5	Edmonton	70	6	36.0	2.25	2.2	Vanburen	46	- 2	26.1	2.20	12.0
Wilton Junction	48	- 4	23.9	1.02	5.5	Eubank	72	2	34.3	3.04	2.2	Vanceboro	46	- 24	16.8	4.14	17.2
Winterset	50	- 6	26.0	T.	T.	Falmouth						Winslow	43	- 24	16.8	4.14	17.2
Woodburn				0.05	0.5	Fords Ferry	69	6	35.2	2.73	...	Maryland.					
Kansas.						Frankfort	67	4	33.4	2.28	2.0	Annapolis	62			4.15	1.0
Abilene						Franklin	72	13	37.7	1.44	1.4	Bachmans Valley	50	6	29.0	6.08	13.0
Achilles	64	- 7	31.4	0.09	0.9	Greeensburg	70	8	33.4	2.69	1.5	Boettcherville	54	- 6	28.4	3.88	14.0
Alton	59	- 2	31.2	0.15	1.5	Henderson	68	5	33.2	2.63	0.8	Cambridge	54	15	34.2	4.71	3.0
Anthony						Highbridge	70	8	34.2	2.06	0.2	Chase	56	8	31.4	4.25	2.5
Atchison	57	- 3	31.0	0.45	4.3	Hopkinsville	70	9	36.9	2.66	T.	Cheltenham	59	10	32.8	3.67	1.8
Baker	54	- 5	26.1	T.	T.	Irvington	67	5	34.9	1.60	2.0	Chestertown	54	11	32.0	3.78	0.8
Beloit	57	- 2	30.0	T.		Jackson	77	8	38.4	2.37	...	Chewsville	51	1	29.3	3.95	9.0
Burlington	61	- 6	33.0	0.22	1.8	Leitchfield	67	6	33.6	2.55	1.5	Clearspring	50	5	28.6	5.07	10.8
Chanute	59	- 1	33.6	0.69	4.8	Loretto	68	5	34.9	2.30	4.0	Colenan	53	10	32.3	4.00	2.0
Colby	61	- 2	30.8	0.22	1.0	Manchester	72	2	36.0	2.90	1.2	Collegepark	56	10	31.6	3.75	1.1
Columbus	60	- 2	33.9	1.15	1.5	Marrowbone	71	5	35.2	2.2	...	Colora.				4.98	8.0
Cottonwood	61	- 4	32.2	0.32	2.7	Mayfield	68	11	37.0	2.62	7.2	Cumberland	59	7	30.2	3.96	13.0
Delphos	55	- 4	29.8	0.26	2.0	Maysville	69	4	33.2	2.64	4.5	Darlington	52	- 7	30.2	4.60	3.5
Dresden	62	0	32.7	0.05	0.5	Middlesboro	70	2	34.6	2.40	...	Deer Park	56	- 5	24.8	4.65	20.0
Ellinwood	68	1	33.3	0.21	2.0	Mount Sterling	68	5	33.0	2.41	3.5	Denton	64	12	32.6	2.30	2.0
Englewood	76	7	34.0	0.43	5.0	Owensboro	66	6	35.4	2.58	1.0	Easton	55	12	33.6	3.61	2.5
Eureka				0.12	0.5	Paducah a	67	0	31.4	3.78	7.8	Fallston	54	8	30.7	4.28	6.0
Eureka Ranch	68	- 40	32.0	0.09	0.5	Paducah b	71	10	38.2	3.20	T.	Frederick	53	8	31.9	4.24	8.5
Fall River	60	- 3	33.9	0.19	T.	Pikeville	75	9	37.1	2.55	4.0	Grantsville	53	- 6	24.1	3.60	15.5
Farnsworth	69	2	33.9	0.06	0.4	Princeton	70	5	35.3	2.60	3.5	Greatfalls	57	9	30.8	4.28	...
Forsha	67	- 1	33.0	0.25	1.5	Richmond	52 ^e	7	32.0	2.03	...	Greenspring Furnace	51	0	29.6	3.85	8.5
Frederonia				T.	T.	Richmond	65	9	31.8	2.21	5.5	Hancock	52	- 2	30.0	3.10	9.0
Fort Leavenworth	54	- 2	29.4	0.70	7.0	St. John	66	5	33.6	2.44	0.5	Harney	59	10	33.8	3.53	1.0
Fort Scott	61	- 4	34.0	1.02	5.0	Scott	64	- 2	30.4	1.82	4.4	Jewell	59	10	31.6	4.57	6.0
Frankfort	53	- 4	29.0	0.55	4.5	Shelby City	69	3	34.0	2.37	1.5	McDonogh	53	7	28.2	4.63	...
Garden City	72	8	34.9	0.25	2.0	Taylorville	67	3	32.6	2.71	8.0	Mount St. Marys College	52	6	29.2	4.27	13.5
Gove*1.	65	5	32.4	0.10	1.0	Williamsburg	82	5	38.0	2.89	3.5	New Market	50	7	30.3	4.76	9.8
Grenola	62	0	33.6	T.	T.	Williamstown	65	- 9	31.8	2.21	5.5	Pocomoke City	60 ^c	14	37.2	2.88	...
Hanover	50	- 2	28.3	0.54	4.0	Abbeville	77	26	50.8	6.81	...	Prince Fredericton	60	10	33.8	3.77	3.0
Harrison	55	- 2	28.4	0.25	2.5	Alexandria	82	22	46.9	5.61	...	Princess Anne	60	13	35.4	3.78	1.2
Hays	67	- 2	31.3	0.15	1.5	Anite	71	22	46.8	9.76	...	Queenstown	54	10	32.7	3.13	1.5
Holton	58	- 3	31.0	0.38	3.8	Baton Rouge	74	25	48.4	8.22	...	Sharpsburg	50	6	30.2	4.11	9.0
Horton	54	- 3	29.2	0.48	5.0	Burnside	78 ^d	24 ^d	50.8	6.94	...	Solomons	56	15	34.6	3.05	3.4
Hoxie	62	- 2	32.4	0.10	1.0	Calhoun	76	17	42.9	2.77	...	Sudlersville	52	11	33.2	3.08	2.0
Hutchinson	63	- 1	32.4	0.40	4.0	Cameron	69	32	50.9	4.51	0.2	Takoma Park	55	9	30.6	5.20	...
Independence	60	- 4	45.0	0.47	2.0	Clinton	79	25	48.1	4.37	...	Van Bibber	55	10	31.9	4.61	12.5
Jetmore	69	4	33.8	0.05	0.5	Collington	80	20	46.3	4.84	...	Westernport	49	3	28.8	2.73	...
La Crosse	70	- 2	33.0	0.15	1.5	Covington	74	23	48.3	7.64	...	Woodstock	54	9	33.0	3.69	6.6
Lakin	67	6	32.8	0.20	2.0	Donaldsonville	75	27	49.7	7.09	...	Massachusetts.					
Lawrence	56	- 2	31.4	0.44	4.0	Emilie	73	27	50.2	6.44	...	Amherst	46	- 12	24.2	3.28	9.0
Lebanon	53	- 3	29.0	0.30	3.0	Farmerville	77	18	41.4	2.54	...	Bedford	44	- 5	26.2	3.16	6.5
Lebo	60	- 1	31.8	0.36	3.0	Franklin	73	27	50.4	6.66	...	Bluehill (summit)	48	- 6	26.0	4.29	10.0
Leoti	71	- 4	33.8	0.04	0.4	Grand Coteau	78	28	50.8	6.17	...	Cambridge	48	- 3	27.2	3.54	...
Little River	63	- 1	31.6	0.20	2.0	Hannond	74	24	50.3	5.93	...	Chestnuthill	47	- 3	28.2	3.95	7.0
Macksville	69	0	31.2	0.22	2.2	Houma	77	29	50.2	5.92	...	Concord	49	- 6	25.0	3.16	5.4
McPherson	53	- 2	30.4	0.47	5.0	Jennings	77	27	50.2	5.70	...	East Templeton #1	46	- 10	23.5	2.75	7.8
Madison	65	- 3	32.0	0.14	1.5	Lafayette	77	26	49.4	6.82	...	Fall River	52	- 8	29.8	4.48	4.2
Manhattan b	56	- 4	31.8	0.65	4.5	Lake Charles	78	29	50.1	5.43	...	Fitchburg a*	46	- 8	24.7	2.68	7.5
Manhattan c	56	- 5	31.6	0.63	5.5	Lake Providence	80	19	48.0	5.83	...	Fitchburg b	48	- 9	24.8	2.65	8.0
Marion	56	- 3	32.7	0.85	5.5	Lawrence	75	23	48.3	5.28	...	Framingham	50	- 7	27.0	3.77	4.5
Marion.	56	- 3	32.7	0.70	4.0	Lighthill	84	19	46.4	3.44	...	Groton	45	- 12	23.8	2.90	11.0
Meade.	73	9	33.6	0.11	2.0	Mansfield	84	19	46.4	3.44	...	Holyoke				3.16	8.0
Medicine Lodge	72	7	35.6	0.11	T.	Monroe	80	22	46.5	5.36	...	Hannais.	48	- 8	24.5	3.18	5.0
Minneapolis	57	0	32.3	0.35	3.0	New Iberia	76	32	52.6	5.20	...	Jefferson.	48	- 6	24.2	3.84	6.8
Moran.	58	- 3	32.9	0.56	4.2	Opelousas	77	26	48.4	6.13	...	Lawrence.	48	- 6	24.8	3.31	8.5
Mounthope*1	60	7	34.9	0.20	2.0	Oxford	84	22	45.6	5.15	...	Leominster.	47	- 6	26.2	3.67	7.5
Ness City	67	4	35.4	0.42	4.0	Plain Dealing	76	25	45.3	3.34	...	Lowell a.	47	- 8	25.9	3.39	...
Newton	64	1	32.2	0.40	4.0	Port Eads	75	34	52.4	3.89	...	Lowell b.	50	- 8	25.9	2.64	8.0
Norwich	64	4	34.6	0.10	1.0	Robeline	80	20	47.1	2.95	...	Middleboro.	51	- 4	28.3	3.94	5.0
Oberlin				0.20	...	Ruston</											

TABLE II.—Climatological record of voluntary and other cooperating observers—Continued.

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>Michigan—Cont'd.</i>						<i>Michigan—Cont'd.</i>						<i>Michigan—Cont'd.</i>					
Arbela	49	-5	22.6	2.95	11.5	Thomaston	35	-15	11.4	0.70	7.0	Lake	°	°	°	Ins.	Ins.
Baldwin	42	-7	20.9	2.10	9.0	Thornville	47	-8	22.2	1.73	16.0	Lake Como	76	18	42.5	5.78	T.
Ball Mountain	48	-7	22.2	1.04	9.4	Traverse City	55	-1	23.2	2.08	19.5	Laurel	76	20	45.6	6.45	
Baraga	43	-11	14.5	0.50	5.0	Vassar	47	-7	23.8	1.70	8.2	Leakesville	80	20	47.2	4.63	
Battlecreek	48	-9	22.6	3.32	16.1	Wasepi	49	-9	23.0	2.24	13.5	Louisville	79	16	44.6	4.92	
Bay City	46	0	22.0	1.53	6.0	Waverly	46	-1	23.7	1.81	14.5	Macon	78	20	42.6	3.43	
Benzonia	45	5	22.5	2.79	26.9	Webberville	49	-1	22.7	3.06	9.0	Magnolia	75	21	47.6	8.18	
Berlin	46	-5	22.0	1.41	8.7	West Branch	41	-4	17.9	2.21	19.5	Natchez	81	25	49.8	4.20	
Berrien Springs	48	-1	23.7	3.50	29.5	Wetmore	35	-4	15.6	1.10	11.0	Nittayuma	79	21	43.8	5.81	
Big Rapids	42	-5	19.4	2.66	20.5	Whitecloud	48	-2	20.2	1.53	14.8	Okolona	76	18	41.3	5.52	
Birmingham	48	-7	22.6	0.99	6.9	Whitethorn Point	43	-2	20.2	1.53	14.8	Patmos	75	23	50.0	4.67	
Boon	40	-5	17.8	2.34	17.5	Ypsilanti	52	-10	22.2	1.60	7.7	Pearlington	79	16	43.8	4.72	
Calumet	35	-5	14.0	2.20	22.0							Pittsburg	76	16	42.6	5.33	
Carsonville	47	3	25.0	1.10	11.0							Pontotoc	81	23	50.2	6.21	
Cassopolis	51	-7	21.4	4.45	27.5							Poplarville	73	12	40.6	5.05	
Charlevoix	47	-8	22.2	1.30	10.0							Ripley	80	17	45.8	3.55	
Charlotte	48	-8	22.2	.....	.....							Shoecoe	75	21	48.0	6.20	
Chatham	50	-17	15.9	2.45	19.5							Stonington	79	16	43.8	4.72	
Cheboygan	43	-2	21.2	0.75	6.0							Suffolk	75	21	48.0	5.63	
Clinton	54	-8	24.0	1.14	7.0							Swartwout	73	23	49.6	5.94	
Coldwater	52	-8	25.2	1.10	6.0							Thornout	76	23	45.7	8.45	
Deerpark	38	-7	19.2	2.94	26.0							Tupelo	78	18	41.9	5.66	
Detour	40	-7	19.4	2.35	14.0							University	77	16	43.1	5.85	
Dundee	55	-10	23.6	1.15	11.5							Walnutgrove	83	20	45.2	4.44	
Eagle Harbor	37	1	18.6	0.21	2.0							Watervalley	76	17	43.1	5.68	
East Tawas	45	-8	20.7	1.38	6.0							Waynesboro	75	19	46.2	4.01	
Eloise	52	9	22.8	1.08	9.8							Woodville	74	25	48.4	6.10	
Ewen	34	0	14.2	0.70	7.0							Yazoo City	81	22	43.8	4.67	
Fennville	44	4	24.0	2.93	20.6							<i>Missouri.</i>					
Fitchburg	50	-10	22.0	3.13	10.0							Appleton City	60	-11	31.6	0.86	5.4
Flint	48	-4	21.5	1.51	9.0							Arthur	58	-3	33.0	0.80	3.5
Frankfort	44	8	25.8	1.20	12.0							Avalon	52	-5	29.4	0.75	0.5
Gaylor	42	-2	18.0	1.65	16.5							Bethany	50	-4	28.6	0.15	1.5
Gladwin	37	2	16.6	3.05	16.5							Birchtree	66	6	34.2	1.56	
Grand Marais	37	1	20.7	2.76	18.0							Boonville	66	-	1	1.91	6.1
Grand Rapids	48	4	24.6	1.11	7.0							Brunswick	63	-6	28.8	1.32	8.5
Grape	55	-8	23.1	1.21	8.7							Carrollton	63	-9	30.0	1.79	3.3
Grayling	45	-2	19.4	3.30	28.5							Conception	52	-2	34.5	0.40	0.0
Hagar	48	4	25.4	3.44	11.8							Darkserville	60	-5	29.3	1.46	11.1
Hanover	51	-11	22.4	1.72	10.0							Dean	65	4	36.0	1.36	T.
Harbor Beach	43	-3	22.6	1.44	5.0							Desoto	65	-3	33.2	1.43	6.5
Harrison	36	-5	15.2	1.91	15.0							Downing	65	-2	33.6	0.45	4.0
Harrisville	42	-8	19.6	2.08	12.2							Edgehill	65	2	33.6	2.03	2.5
Hart	40	-2	21.7	1.21	12.0							Edwards	67	-1	33.4	1.41	5.0
Hastings	49	-3	23.4	1.87	9.9							Eightmile*	67	-6	29.6	1.09	7.2
Hayes	48	-8	20.1	1.88	11.5							Fairport	63	0	31.6	2.06	9.9
Highland Station	52	-10	22.5	3.20	24.0							Fayette	66	-5	31.2	1.83	8.0
Hillsdale	52	-10	22.5	3.20	24.0							Fulton	66	-5	28.3	1.20	2.0
Humboldt	38	-32	12.0	0.50	5.0							Galeua	56	-1	30.0	0.50	4.2
Ionia	44	-6	26.7	1.1	11.0							Gallatin*	63	-1	29.6	1.62	10.5
Iron Mountain	44	-15	14.2	0.54	4.0							Glasgow	63	-1	29.6	0.58	4.4
Iron River	36	-26	8.4	0.45	1.0							Gorin	61	-25	28.3	0.12	1.0
Ironwood	38	-13	12.8	2.00	20.0							Grant City	62	-5	28.3	0.12	1.0
Ishpeming	42	-16	12.6	0.55	5.5							Halfway	70	-4	35.24	1.77	7.0
Ivan	41	-12	19.6	2.55	21.0							Harrisonville	56	-5	28.3	1.19	6.0
Jackson	50	-8	22.0	1.69	8.0							Hazlehurst	62	-	28.3	0.22	1.0
Jeddo	17	-5	21.6	1.22	11.8							Hermann	64	-	1	1.55	10.0
Kalamazoo	45	3	22.2	2.85	20.5							Houston	68	4	34.6	2.05	1.0
Lake City	41	0	21.1	2.10	20.0							Huntsville	62	-4	29.5	1.59	0.0
Lansing	49	-6	22.3	1.54	7.6							Ironton	64	4	33.4	1.45	2.8
Lapeer	48	-5	22.0	.....	.....							Jackson	70	7	35.4	2.43	7.5
Lathrop	40	-18	16.0	3.00	5.0							Jefferson City	64	-1	30.5	1.69	7.8
Lincoln	49	04	20.54	0.55	5.5							Joplin	66	5	36.4	1.16	T.
Ludington	40	-3	20.2	2.25	14.0							Kidder	61	-7	28.3	0.28	2.7
Mackinac Island	40	1	20.5	1.60	12.0							Koshkonong	67	7	36.2	2.10	0.7
Mackinaw	40	-5	23.8	1.81	13.0							Lamar	62	-3	34.6	0.85	2.0
Mancelona	42	4	21.8	3.90	36.0							Lamonte	66	-1	32.8	1.45	1.5
Manistee	40k	-23	28.1	1.80	13.0							Lebanon	66	-1	32.0	0.97	5.5
Manistique	38	-4	19.4	1.21	5.5							Lexington	53	-5	29.6	0.45	4.5
Menominee	45	-10	18.1	0.25	2.5							Liberty	66	-5	29.6	0.45	4.5
Midland	45	-6	26.2	1.08	9.5							Louisiana	60	-4	29.0	1.97	11.8
Mio	41	-4	18.8	1.87	11.3							Macon	61	-5	29.0	1.46	7.0
Montague	43	5	23.8	2.15	18.5							Marblehill	68	5	34.8	1.48	1.5
Mount Pleasant	45	-4	20.54	1.57	12.0							Marshall	62	-5	29.9	1.69	8.0
Muskegon	47	5	24.0	1.50	13.0							Maryville	50	-5	25.3	0.30	2.8
Newberry	41	6	22.9	1.55	15.5							Mexico	67	-4	29.5	2.31	12.6
Old Mission	40	8	21.0	2.00	11.5							Miami*	59	-4	29.2	1.16	7.5
Olivet	48	-9	22.8	1.96	9.9							Mineral spring	63	5	34.9	2.35	1.0
Omer	44	-11	19.4	1.50	7.5							Monroe City	63	-9	27.6	2.13	13.1
Onaway	42	-8	20.0	1.28	10.0							Montreal	69	-9	32.2	1.82	6.2
Ontonagon	37	-9	17.4	2.45	24.5							Mountaintrove	66	2	33.6	1.81	0.0
Ovid	47	-4	21.9	1.54	6.0							Mount Vernon	68	4	35.9	1.08	T.
Ow																	

TABLE II.—*Climatological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.			Stations.	Temperature. (Fahrenheit.)			Precipita- tion.			Stations.	Temperature. (Fahrenheit.)			Precipita- tion.					
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.	Mean.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.	Mean.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.				
<i>Missouri—Cont'd.</i>																							
St. Charles	65	-2	32.0	1.94	9.0	Ins.	Ericson	0	0	0	0.30	3.0	2.5	Nevada—Cont'd.	0	0	0	Ins.	Ins.				
St. Joseph				0.24	2.5		Ewing				0.25			Carlin* ¹	44	0	27.6	1.55	14.0				
Sarcoxie	62	-6	31.2	1.37	9.0	T.	Fairbury	56	-4	27.0	0.20	2.3		Carson City	60	-6	34.3	2.86	11.8				
Sedalia	64	-1	33.0	1.49	1.0		Fairmont	53	-8	25.0	0.15	1.5		Cranes Ranch				1.91					
Seymour				1.15	7.0		Fort Robinson	55	-2	29.2	0.60	6.0		Elko	47	-3	27.4	6.00	3.0				
Shelbyville				1.15	7.0		Franklin	59	-8	27.5	0.20	2.0		Ely	54	-13	28.2	0.75	7.0				
Sikeston	70	10	36.6	2.45	T.		Fremont	51	-4	23.8	T.			Eureka	59	0	31.5	1.00	10.0				
Steffenville	55	-6	28.2	1.39	9.0		Fullerton				0.05	0.5		Fenelon* ¹	45	4	26.6						
Sublett	52	-6	26.3	1.65	4.0		Geneva	56	-9	26.3	0.30	3.0		Golconda* ¹	52	9	31.0	1.70	18.5				
Trenton	49	-3	28.4	0.36	2.5		Genoa (near)	50	-3	26.0	T.			Halleck* ⁵	58	0	28.6	1.95	16.5				
Unionville	50	-6	26.0	0.48	1.5		Gering	59	5	31.6	0.30	1.0		Hawthorne	65	10	36.4	1.10	2.0				
Vichy	70	-5	32.4	2.26	6.5		Gordon				0.80	8.0		Humboldt	61	7	33.0	1.72	14.0				
Warrensburg	60	-5	32.2	1.68	10.1		Gosper				0.30	3.0		Lee				4.07	18.0				
Warrenton	67	-2	29.9	1.70	7.2		Gothenburg	59	-6	26.7	0.40	4.0		Lewers Ranch	59	3	37.2	7.40	31.0				
Wheatland				1.77	4.2		Grand Island b.	55	-5	27.2	0.20	2.0		Lovelocks	52	2	34.2	0.50	5.0				
Willow Springs	68	-4	33.6	1.80	T.		Greeley				0.10	1.0		Martins	66	-8	36.1	2.23	8.0				
Windsor	61	-7	32.4 ^c	1.04	4.5		Guide Rock				0.30	3.0		Mill City* ¹	63	7	34.0						
Zeitonia	56 ^b	5 ^x	32.0 ^b	1.36	T.		Haigner	45	-12	21.5	0.00	0.0		Morey	57	-4	33.2	1.69	17.0				
<i>Montana.</i>							Hartington	54	-5	26.5	0.20	2.0		Palisade	59	-2	30.2	1.69	7.0				
Adel	51	-15	26.5	0.70	7.0		Harvard	54	-5	26.5	0.20	2.0		Palmetto	65	4	33.4	1.00	10.0				
Anaconda	52	-1	25.5	0.85			Hastings* ¹	52	-6	27.1	0.20	2.0		Potts	55	-16	28.3	0.84	8.5				
Augusta	63	-14	31.0	0.19	1.5		Hayes Center				0.28	2.8		Reno State University	59	-3	34.2	3.00	11.5				
Billings	59	0	31.2				Hay Springs	47	-12	23.6	0.48	4.9		Riviere	72	23	47.1	0.11					
Boulder	48	-2	25.3	0.45	2.0		Hebron	54	-1	28.0	0.16	2.2		Sodaville	61	9	35.2	0.76	2.0				
Bozeman	50	-2	26.2	0.78			Hickman				0.20	2.0		Tecoma	50	0	28.6	0.77	6.0				
Butte	49	-5	27.2	0.42	4.2		Holbrook				0.40	3.1		Toano* ⁶	46	0	24.2	2.68	11.5				
Canyon Ferry	55	-9	25.5	0.57	5.0		Holdredge	50	5	28.2	0.20	2.0		Wabuska	63	4	31.7						
Columbia Falls	49	5	27.2	1.75	1.5		Hooper* ¹	46	-2	24.7	T.	T.		Wadsworth				Wells* ¹	51	1	27.8	2.00	16.0
Crow Agency	55	-10	27.8	0.50	3.0		Imperial	60	-4	31.3	0.22	2.2		Wood	53	1	28.5	3.77	7.0				
Culbertson	40	-21	11.8	0.23	2.0		Johnstown				0.35	3.5		<i>New Hampshire.</i>									
Deerlodge	51	-7	22.6	0.05	0.5		Kearney	57	-5	29.0	0.22	2.2		Alstead	40	-13	22.7	3.13	10.8				
Dillon	49	1	27.6	0.82	8.2		Kennedy	50	-12	26.8	0.70	7.0		Berlin Mills	42	-30	15.6	2.41	14.2				
Ekalaka	50	-18	23.3	0.40	4.0		Kimball	55	2	29.2	0.15	1.5		Bethlehem	44	-21	16.8	2.73	9.5				
Fort Benton (a)	50	-4	26.3	0.10	1.0		Kirkwood	46	-4	23.1	0.18	1.8		Brookline* ¹	46	-20	24.7	1.90	11.2				
Fort Logan	50	-10	25.8	0.12	1.2		Laclede	52	-4	24.2	T.	T.		Chatham	46	-27	16.0	2.85	21.0				
Glasgow				0.17			Lexington	59	-6	27.6	0.35	3.5		Concord	48	-22	20.7	3.44	10.2				
Glendive	46	-30	16.2	1.32	13.0		Lodgepole	62	0	30.1	T.	T.		Durham	49	-11	23.8	6.05	12.0				
Great Falls	56	-2	31.8	0.08	0.7		Loup	60	-8	28.1	0.20	3.0		Franklin Falls	44	-14	20.4	3.88	13.2				
Hamilton	54	7	30.0	1.08	3.5		Lynch	47	-12	20.2	0.13	1.4		Grafton	48	-26	17.6	3.36	14.0				
Kipp	50	-18	23.1	0.30	3.0		Lyons				0.02	0.2		Hanover	43	-24	18.3	3.03	10.8				
Lamedeer	60	-19	29.6		5.0		McCook* ¹	54	0	32.1	0.10	1.0		Keene	45	-17	21.7	2.73	7.0				
Lewistown	50	0	27.9	0.47	4.8		McCool Junction				0.05			Littleton	34	-17	15.3	2.61	19.0				
Livingston	52	-7	24.1	0.25	0.5		Madison	46	-5	23.7	T.	T.		Manchester				3.39					
Marysville	42	-6	23.8	0.04	17.5		Maridell	58	-6	27.8	0.20	2.0		Nashua	48	-10	24.0	3.05	8.8				
Missoula	46	-2	24.6	0.90	5.5		Marquette				0.15	1.5		Newton	50	-11	23.6	3.63	8.0				
Parrot	52	5	29.2	0.37	3.7		Mason				0.40	4.0		North Stratford				2.69					
Poplar	40	-23	13.4	T.			Minden b.	55	-6	27.4	0.33	3.0		Peterboro	46	-15	21.6	3.03	5.5				
Redledge	57	-5	26.8	0.44	1.2		Nebraska City c.	51	-3	28.7	T.	T.		Plymouth	42	-23	18.2	3.92	21.9				
St. Pauls	51	-5	26.4	0.50	5.0		Norfolk	52	-8	21.9	0.14	T.		Sanbornton	44	-15	18.6	3.15	8.5				
St. Peter	52	-11	29.5	0.50	5.0		North Loup	60	-8	23.8	0.30	2.5		Sewalls Falls				3.59	11.4				
Springbrook	44	-22	17.2	1.23	10.9		Oakdale	51	-9	22.0	0.06	0.6		Stratford	45	-28	15.3	2.38	13.6				
Summit	54	-12	24.6	8.50	68.0		Odell	49	-14	22.0	0.35	3.5		West Stewartstown				3.04	20.6				
Toston	51	3	26.3	0.11	1.1		O'Neill				0.22			<i>New Jersey.</i>									
Troy	55	6	29.2	4.50	13.5		Osceola				0.01	0.1		Asbury Park	51	9	32.6	4.67	5.0				
Twin Bridges	54	-7	24.3				Palmer				0.20	2.0		Barnegat	57	8	33.0	4.86	4.0				
Twodot	50	5	25.6	0.70	5.0		Palmyra* ¹	54	-8	26.9	T.	T.		Bayonne	51	8	29.3	3.79	4.5				
Utica	52	3	29.9	0.50	5.0		Pawnee City	52	-2	26.5	T.	T.		Belvidere	48	5	27.6	4.54	8.0				
Winston	55	2	26.4	0.63	6.1		Plattsmouth b.	52	-2	26.5	T.	T.		Bergen Point	50	8	29.5	4.40	7.4				
Yale	48	-2	27.1	0.65	6.5		Purdum	53 ^c	-14	25.4 ^c	0.36	3.9		Beverly	52	9	31.4	3.77	7.0				
<i>Nebraska.</i>				0.20			Ravena a.	59	-6	27.2	0.37	3.7		Blairstown	47	4	26.8	3.45	7.0				
Agate	54	-2	26.6	0.24	2.5		Ravena b.				0.40	4.0		Bridgeton	55	10	33.2	3.58	3.0				
Agree* ¹	44	-14	19.6	1.15	1.5		Redcloud	60	-3	27.3	0.30	3.0		Camden	52	10	32.3	4.07	5.5				
Albion	59	-7	25.8	0.00			Republican* ¹	48	-4	28.5	0.25	2.5		Canton				3.12	2.7				
Alliance	53	-5	27.4	0.05	0.5		Rulo				0.02	0.2		Cape May C. H.	57	9	33.5	3.81	3.7				
Alma	54	-7	28.0	0.43	4.0		St. Libery	54	-5	27.8	0.13	1.2		Charlottesville	50	-3	26.7	4.89	6.0				
Ames	51	-2	27.5	0.02	T.		St. Paul	55	-4	28.2	0.15	1.5		Chester	50	2	26.5	4.79	8.0				
Ansley	54	-6	25.7	0.62	6.2		Superior	55	-4	28.4	0.11	1.0		Clayton	55	9	31.7	3.09	9.0				
Arapahoe				0.20	2.0		T.	47	-8	23.0	0.12	1.8		College Farm	50	8	29.3	3.84	7.0				
Arcadia				0.40	4.0		T.	55	-10</td														

TABLE II.—Climatological record of voluntary and other cooperating observers—Continued.

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
New Jersey—Cont'd.	°	°	°	In.	In.	New York—Cont'd.	°	°	°	In.	In.	North Carolina—Cont'd.	°	°	°	In.	In.
Three Bridges.	55	7	32.3	5.34	6.5	North Hammond.	55	7	32.3	2.35	21.4	Springhope*1.	65	20	42.9	2.49	2.49
Toms River.	53	11	34.3	4.49	6.0	North Lake.	55	8	30.2	2.02	18.0	Statesville.	65	13	38.8	6.43	T.
Trenton.	53	7	32.7	4.55	4.5	Number Four.	50	8	25.7	1.04	6.7	Tarboro.	69	20	43.4	3.38	
Tuckerton.	55	10	32.8	3.65	4.0	Ogdensburg.	44	19	16.4	2.78	11.6	Washington.	73	21	46.0	2.97	T.
Vineyard.	57	6	33.1	4.66	3.2	Oneonta.	46	6	23.4	2.46	9.0	Waynesville.	68	8	37.4	1.73	
Woodbine.	57	3	32.6	3.67	3.2	Otto.	53	2	23.2	2.06		Weldon a.	64	20	39.2	2.46	
Woodstown.						Oxford.	44	8	20.8	3.92	21.1	Weldon b.				2.42	
New Mexico.						Palermo.				3.19	13.8	North Dakota.					
Almagordo.	68	17	41.2	0.30	3.0	Penn Yan.	44	4	24.5	1.46	4.7	Amenia.	42	—26	8.6	1.00	9.8
Albert.	71	15	39.1	T.	T.	Perry City.	45	2	23.4	2.28	9.3	Ashley.	45	—25	12.0	0.50	5.0
Albuquerque.	70	11	36.3	0.08	1.5	Plattsburg.	47	0	21.2	2.50	6.0	Berlin.	46	—30	9.0	1.64	16.4
Alma.	67	10	38.1	0.01		Port Jervis.	49	2	25.4	3.00	6.0	Bonneau.	36	—28	6.6	0.50	5.0
Arabella.	72	10	40.8	0.22	3.0	Primrose.	51	4	28.0	4.25	7.0	Buxton.	40	—25	9.0	0.76	7.6
Bell ranch.						Redhook.				3.34	8.0	Cando.	36	—37 ^a	1.24	0.34	3.4
Bluewater.	54	0	28.2	0.10	1.0	Richmondville.	47	7	22.0	1.78	4.5	Church Ferry.	43	—28	5.8	0.66	6.6
Cambray.						Ridgeway.	50	5	24.6	2.78	16.2	Coalharbor.	41	—20	12.1	0.79	7.3
Carlsbad.	79	13	45.2	0.33	2.5	Rome.	40	10	22.2	3.29	26.0	Devils Lake.	35	—30	5.7	1.08	10.8
Deming.						Romulus.	46	4	25.2	1.56	13.0	Dunseith.	40	—31	4.6	0.60	5.0
Dorsey.	62	6	31.4	T.	T.	Salisbury Mills.				3.50		Edgeley.	46	—21	11.8	0.76	7.6
Eagle Rock Ranch.	60	2	31.1	0.24	3.4	Saranac Lake.	43	—24	17.3	3.26	21.9	Elbowoods.	39	—19	9.7		5.0
Fort Bayard.	63	17	38.0	0.78	0.2	Saratoga Springs.	41	—25	20.7	4.26	14.5	Ellendale.	44	—20	11.6	0.70	7.0
Fort Stanton.	65	7	33.6	0.36	3.6	Setauket.	51	8	30.5	3.83	4.5	Fargo.	46	—30	7.0	0.83	8.3
Fort Union.	64	4	34.6	T.	T.	Shortsville.	50	—1	25.2	2.12	3.4	Forman.	36	—25	8.4	0.75	7.5
Fort Wingate.	53	10	32.8	0.46	4.6	Skaneateles.				3.75		Fort Yates.	56	—21	17.7	0.29	2.9
Fruitland.	55	8	30.6	0.09	0.3	Southampton.	49	8	31.2	3.75	4.5	Gallatin.	38	—31	6.6	0.93	9.8
Gage.						South Butler.	44	—5	23.6	3.66	19.0	Glenullin.	49	—14	17.0	0.91	9.3
Galisteo.	62	5	28.9	0.10	1.0	South Canisteo.	49	—11	22.4	3.25	24.0	Grafton.	38	—28	5.2	1.05	10.5
Gallinas Spring.	66	10	36.6	0.10	2.0	Southeast Reservoir.				4.83		Hamilton.	35	—30	3.0	0.86	9.1
Hot Springs.	65	11	35.0	T.	T.	South Kortright.	48	8	21.7	2.55	8.9	Hannaford.	38	—31	7.0	0.93	9.3
Las Vegas.	62	7	33.4	0.07	1.0	South Schroon.	46	—19	18.3	3.49	24.0	Jamestown.	42	—24	9.0	1.16	9.9
Lordsburg.						Speer Falls.	43	—18	21.2	3.36		Larimore.	41	—29	6.3	0.65	6.5
Mesilla Park.	71	12	41.8	0.20	2.0	Straits Corners.	43	—4	22.0	2.55	16.5	McKinney.	40	—27	6.3	T.	T.
Mountainair.	58 ^b	8	33.5	0.60	3.0	Ticouderoga.	44	—17	21.4	3.27	19.0	Mayville.	38	—24	7.6	0.24	2.4
Roswell.	80	10	42.8	0.22	2.0	Volusia.	49	3	23.1	2.18		Medora.	50	—29	18.4	0.85	8.5
San Marcial.	72	15	39.2	0.05	0.5	Walton.	44	—5	22.8	2.72	20.8	Melville.	40	—21	11.3	0.84	3.4
Strauss.						Wappinger Falls.	48	—1	25.2	3.56	8.0	Minnewaukon.	42 ^c	—26	8.2 ^b	T.	T.
Taos.	56	—1	23.8	0.25	T.	Warwick.				2.88		Minot.	43	—23	13.0	0.20	2.0
Winsor Ranch.	55	1	26.8	T.	T.	Watertown.	48	—19	21.4	5.01	28.0	Napoleon.	45	—18	13.0	0.60	5.5
New York.						Waverly.	48	—5	24.9	2.52	14.8	New England.	48	—18	16.2	0.25	2.5
Adams.						Wedgewood.	44	—3	22.1	3.29	16.7	Oakdale.	50	—18	18.2	1.45	14.5
Addison.	47	—4	24.6	1.87	11.0	Wells.	45	—29	19.8	1.50		Pembina.	39	—31	2.4	0.53	5.3
Adirondack Lodge.	43	—38	16.2	4.35	28.7	West Berne.	47	—11	22.4	2.07	7.0	Portal.	38	—25	7.2	0.30	3.0
Akron.						Westfield b.	52	—5	25.2	1.27		Power.	40	—26	7.8	0.70	7.0
Alden.	51	—8	25.6	2.40	23.9	Windham.	48	—8	23.7	1.85	8.4	Steele.	39	—23	10.8	0.60	6.0
Angelica.	50	—11	23.4	1.78	17.7	Youngstown.				1.89		University.	48	—27	8.4	0.70	7.0
Appleton.	51	2	25.6	2.68		North Carolina.						Valley City.	42	—25	7.4	0.86	8.6
Arcade.	44	—11	20.8	3.51	29.1	Biltmore.	63	11	36.2	1.63		Wahpeton.	41	—23	12.6	0.09	0.9
Athens.	46	—7	24.2	2.83	11.4	Brevard.	61	7	32.6	4.30	1.0	Willow City.	40	—32	5.8		
Atlanta.	45	—9	22.6	2.41	12.3	Brewers.	65	8	36.6	5.63	1.0	Ohio.					
Auburn.	45	—2	24.9	0.89	9.9	Bryson City.				2.45	0.8	Akron.	59	—7	25.9	2.59	16.5
Avon.	49	—6	23.6	1.83	9.0	Chapelhill.	67 ^d	17 ^e	40.0 ^f	4.06	8.2	Annapolis.	43 ^g	0	25.0 ^h	2.53	
Axton.	41	—36	15.4	3.92	40.5	Cranberry.	55	2	32.8	3.80		Atwater.				2.25	12.0
Baldwinsville.	46	—7	23.8	3.09	19.5	Currituck.				3.78		Bangorville.	57	—12	24.6	2.75	15.0
Bedford.	48	1	26.2	2.33	5.4	Edenton.	70	20	44.3	2.95		Bellefontaine.	57	—10	26.3	2.16	10.5
Blue Mountain Lake.						Fayetteville.	69	18	43.6	5.08		Bement.				1.56	
Boilvar.	48	—11	22.4	2.85	17.0	Fayetteville.						Benton Ridge.	60	—7	26.0	1.89	11.5
Bouckville.	42	—11	20.7	3.60	25.0	Goldsboro.	70	19	42.5	2.57		Bladensburg.	60	—6	25.8	3.68	10.3
Boys Corner.						Graham.				4.30	0.6	Blaine.	60	—5	29.4	2.99	7.0
Brookport.	47	—2	24.6	2.41	16.5	Greensboro.	64	15	37.4	4.30		Bloomingburg.	58	—8	24.4	1.75	12.0
Caldwell.	42	—18	20.4	3.95	12.9	Henderson.	64	16	39.8	3.01		Bowling Green.	59	—8	24.4	1.75	12.0
Canajoharie.	44	—14	20.1	2.32	11.1	Hendersonville.	67	10	38.5	4.24		Bucyrus.	60	—7	24.5	2.00	13.0
Carmel.	49	—2	26.2	4.81	11.7	Henrietta.	65	15	40.9	5.45		Cambridge.	63	—8	28.5	2.69	8.0
Carvers Falls.	42	—26	19.3	2.71	12.0	Highlands.	58	2	31.5	5.33	3.0	Camp Dennison.	66	—30	31.1	2.50	5.5
Cedarhill.	44	—9	23.2	2.29	6.7	Hightlands.	60	8	36.2	4.98	0.8	Canal Dover.	60	—3	27.0	2.56	8.5
Chazy.	46	—20	16.8	3.22	14.0	Hot Springs.	69	12	39.2	2.96		Canton.	57	—4	26.5	2.46	9.0
Cooperstown.	44	—8	21.7	3.30	16.0	Jefferson.	62	7	35.1	2.08	4.6	Cardington.	59	—9	26.2	2.34	16.3
Cutchogue.	50	7	30.7	4.80	4.0	Kinston.	61	10	36.6	5.06		Cedarville.				2.68	11.0
Dekab Junction.						Lexington.	71	14	40.0	3.41		Centerburg.				2.95	14.0
De Ruyter.	42	18	21.6			Liuville.	56	1	30.4	3.16	3.0	Circleville.	16	—1	29.5	2.57	12.0
Easton.						Littleton.	63	15	38.6	2.81		Clarksville.	67	—3	29.4	2.25	4.5
Elba.	48	—11	22.4	3.97	23.5	Louisburg.	65	17	40.2	2.69		Cleveland.	59	—5	27.8	2.05	11.4
Elmira.	49	0	26.6	2.08		Lumberton.	67	21	42.0	3.15		Clifton.	61	—5	27.4	1.97	7.0
Fayetteville.	48	—10	24.2	2.33	15.0	Marion.	65	10	38.7	5.07	1.5	Coalton.	7				

TABLE II.—Climatological record of voluntary and other cooperating observers—Continued.

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>Ohio—Cont'd.</i>						<i>Oklahoma—Cont'd.</i>						<i>Pennsylvania—Cont'd.</i>					
Greenville	61	-8	26.2	2.39	9.5	Ural	81	7	36.1	0.52	Ins.	Greensboro	°	°	°	Ins.	Ins.
Hanging Rock	73	5	34.0	2.71	1.5	Watonga	77	14	39.8	0.01	T.	Greenville	52	-6	25.8	2.75	6.0
Hedges						Weatherford	77	12	38.1	0.17	T.	Hamburg	47	5	27.9	3.73	6.0
Hillhouse	56	-10	24.0	1.86	11.5	Waukomis	72	13	39.1	0.30		Hamilton	52 ^d	0	23.5	1.75	10.5
Hiram	57	-10	24.2	2.22	9.5	<i>Oregon.</i>						Herrs Island Dam				2.62	6.0
Hudson	56	-12	23.5			Albany b	56	25	42.1	6.94	0.5	Huntingdon a				4.10	14.0
Jacksonboro	59	-8	26.2	3.22	19.0	Alpha	56	25	42.1	20.17	8.4	Huntingdon b	45	2	27.5	3.80	14.5
Killbuck	59	-6	26.0	1.38	7.9	Arlington	60	17	36.4	1.00		Irwin	65	0	30.8	2.15	8.0
Lancaster	65	-2	29.6	4.25	8.5	Ashland	61	20	38.2	5.96		Johnstown	55	-1	28.9	4.53	17.6
Lima	50	-8	24.4	2.78	16.0	Aurora (near)	56	25	41.2	6.32	1.2	Kennett Square ^f	49	8	29.2	4.07	5.5
McConnelsville	67	-1	30.3	2.59	9.5	Bay City	60	29	44.4	27.03	5.5	Lansdale	49	-	23.8	2.37	
McCormick						Bend	57	8	32.6	3.46		Lawrenceville	49	-5	23.8	2.62	13.5
Manara	62	-4	27.4	2.76	6.0	Beulah	52	5	23.8	2.36	17.0	Lebanon	49	5	28.8	4.68	
Mansfield						Blackbutte	52	24	37.4	11.10	22.0	Leroy	44	-3	28.2	2.95	11.2
Marietta	69	6	32.4	3.17	3.5	Blalock	61	21	38.0	1.23	T.	Lewisburg	45	-6	25.6	3.95	14.5
Marion	60	-8	26.4	3.11		Bullrun						Lockhaven a	44	-1	26.2	3.73	10.0
Medina	58	-10	25.0	2.31	14.0	Cascade Locks	56	29	39.2	17.28	27.0	Lockhaven b	44	-	23.9	3.78	15.4
Milfordton						Coquille						Lock No. 4				2.77	8.9
Milligan	71	-13	28.6	3.88	8.0	Corvallis	56	25	40.6	7.24	3.0	Lycippus	60	0	28.6	3.48	15.6
Millport	59	-7	25.6	2.85	9.8	Dayville	58	16	36.4	0.76	3.2	Mifflin	51	-5	25.4	1.82	8.8
Montpelier	53	-10	22.8	1.91	15.5	Doraville	53	26	39.2	9.52	26.0	Oil City				3.82	21.0
New Alexandria	61	-2	28.6			Drain	57	28	42.4	14.31	3.0	Ottsville				3.05	
New Berlin	58	-8	25.6	2.32	6.5	Ella						Parker				3.38	12.4
New Bremen	60	-8	26.4	1.76	12.4	Eugene	57	25	40.6	8.93	11.0	Philadelphia	52	11	33.1	4.28	5.0
New Lexington						Fairview	60	27	45.6	15.82	3.0	Pocono Lake	44	-5	22.5	1.83	
New Richmond	72	-1	31.5	2.02	0.4	Falls City	55	25	40.3	16.30	17.9	Point Pleasant				4.11	
New Waterford	54	-6	26.0	2.61	10.0	Forestgrove	58	22	40.6	9.59	2.5	Pottsville				4.04	
North Lewisburg	57	-9	26.2	2.60	11.0	Gardiner	64	32	48.1	19.73		Quakertown	49	6	28.2	4.55	8.0
North Royalton	56	-8	25.2	2.48	17.5	Glenora	54	24	39.9	28.39	32.5	Reading ²					
Norwalk	59	-7	25.6	3.02	17.0	Government Camp	58	8	31.4	11.61	40.0	Renovo a	45	1	26.2	3.02	23.5
Oberlin	59	-6	26.4	1.89	12.2	Grants Pass	58	26	39.6	11.69	9.8	Renovo b				2.78	15.0
Ohio State University	61	-4	27.2	2.46	11.0	Grass Valley	55	7	33.4	1.95	1.5	Saegerstown	51	-5	24.8	2.88	16.9
Orangeville	57	-5	25.2	1.93	10.0	Heppner	66	18	37.8	1.18	3.0	St. Marys	44	-4	21.6	2.87	22.5
Ottawa	58	-8	25.7	2.28	18.0	Hood River (near)	52	22	35.8	8.94	29.6	Saltsburg				3.00	12.5
Pataskala	62	-4	27.0	3.05	10.7	Huntington	45	-2	28.4	2.22	23.0	Seisbottsville				5.09	
Philo	65	-1	29.6	3.32	4.9	Jacksonville	57	19	38.0	10.83	8.8	Selinsgrove	44	-1	26.6	4.20	15.0
Plattsburg	60	-7	26.1	2.77	17.0	Joseph	50	3	25.8	1.92	11.0	Shawmont				3.99	
Pomeroy	68	4	32.5	1.64	4.0	Klamath Falls	55	9	31.6	3.90	7.0	Smethport	46	-6	22.2	4.20	21.0
Portsmouth a						Lagrange	54	9	32.3	2.72	4.5	Smiths Corners				4.02	
Portsmouth b	73	7	33.6	1.97		Lakeview	52 ^d	0	29.3	3.59	23.3	Somerset	54	-6	25.3	4.13	18.6
Pulse						Landerock	62	15	34.2	1.59	5.0	South Bethlehem	49	5	28.0	5.03	12.8
Redilion						McKenzie Bridge	57	19	37.7	15.00		Spring Mount	47	-1	24.9	3.50	10.8
Riohfield						McMinnville	55	25	41.9	9.39		State College	49	2	25.6	2.62	9.0
Richwood	60	-8	26.4	1.92	10.0	Mohroo	57	22	41.4	11.84	16.0	Towanda				1.59	11.5
Ripley	67	-1	30.2	2.34	6.1	Mount Angel	56	27	41.5	5.97	1.8	Uniontown	67	7	33.5	1.68	
Rittman	59	-7	26.7	2.49	9.7	Nehalem						Warren	52	-3	24.4	2.55	19.0
Rockyridge	59	-10	25.2	1.38	8.6	Newberg	55 ^e	27 ^e	42.1 ^c	7.02	T.	West chester	52	3	26.3	1.86	13.5
Shenandoah	58	-9	25.6	1.81	11.1	Newport	57	33	46.2	10.79		West Newton	49	6	28.0	2.09	5.5
Sidney	59	-7	26.6	2.51	13.2	Pendleton	62	22	38.2	1.08	4.2	Wilkesbarre	49	2	26.8	3.95	11.5
Somerset	65	-2	31.1			Pine d	60	-8	27.3	2.20	16.0	Williamsport	51	4	30.4	4.67	11.2
Springfield						Placer						York					
Strongsville						Prineville	59	11	34.6			Rhode Island					
Swanton						Riverside	58	-5	29.4	2.44	9.5	Bristol	48	3	31.6	4.75	6.0
Thurman	72	3	32.7	2.74	5.0	Salem b	57	29	43.2	4.56		Kingston	52	-2	27.6	5.50	7.0
Tiffin	59	-6	26.1	2.44	16.0	Silverlake	62	-3	31.8	1.73		Pawtucket	47	6	29.4	4.86	0.1
Upper Sandusky	60	-7	26.8	2.40	18.0	Sparta	50	8	26.5	3.20		Providence a	51	3	30.3	4.98	7.5
Urbana	57	10	23.5	2.31		Stafford	55 ^f	25 ^f	39.6 ^f	9.74	T.	Providence c	50	-2	28.3	4.82	6.0
Vanwert	60	1	25.8			The Dalles	58	16	37.4	2.87		<i>South Carolina.</i>					
Vickery	59	-6	25.0	1.52	7.9	Toledo	63	30	45.8	13.08	T.	Aiken	72	18	45.9	3.10	
Wadsworth						Umatilla	61	18	37.6	0.33		Allendale	67	23	45.2	5.99	
Walnut						Vale	55	-2	27.0	1.43	10.0	Anderson	66	16	41.3	4.20	
Warren	53	-5	26.7	2.84	14.7	Prudhoe	66	4	30.8	2.89		Barksdale	65 ^d	15 ^d	40.8 ^d	3.55	
Warsaw	61	3	27.4	2.75	10.0	Coatesville	52	7	30.0	4.60	5.5	Batesburg	69	17	42.9	4.78	
Wauseon	59	-9	23.8	1.24	11.3	Clarion	52	7	30.0	4.60		Beaufort	74	27	49.4	4.82	
Waverly	69	-1	31.0	2.75	5.7	Conestee	52	8	35.1	4.66		Bennettsville	70	19	44.2	2.66	
Waynesville	62	0	26.4	1.83		Centerhill	45	0	25.0			Blackville	74	21	44.4	3.07	
Wellington	60	-6	26.2	2.22	15.0	Chardon	46	2	27.3	2.78	16.0	Bowman	73	20	45.8	5.03	
Williamstown						Brookville						Calhoun Falls				2.53	
Willoughby						Browns						Camden				2.84	
Wooster	60	-8	24.4	3.54	18.5	Butler	55	-3	26.3	2.55	10.0	Cheraw a	71	18	42.0	2.53	
Zanesville						California	68	5	33.4	2.40	5.7	Cheraw b				2.55	
<i>Oklahoma.</i>						Cassandra	49	-3	24.8	2.88	21.0	Clarks Hill	71	18	44.0	3.15	
Arapaho	72	7	35.6	0.06	0.2	Centerhill	45	0	25.0			Clemson College	77	14	39.4	5.21	
Blackburn	69	6	39.2	0.59	T.	Clifton	46	2	27.3	2.78		Conway	75	21	46.4	4.24	
Burnett	74	10	40.1	0.55		Coatesville	52	7	30.0	3.70		Darlington	73				

TABLE II.—Climatological record of voluntary and other cooperating observers—Continued.

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
				Ins.	Ins.					Ins.	Ins.					Ins.	Ins.
<i>South Carolina</i> —Cont'd.	◦	◦	◦	Ins.	Ins.	<i>Tennessee</i> —Cont'd.	◦	◦	◦	Ins.	Ins.	<i>Texas</i> —Cont'd.	◦	◦	◦	Ins.	Ins.
Smiths Mills	69	19	43.2	3.55	2.59	Liberty	◦	◦	◦	2.99	T.	Mount Blanco	◦	◦	◦	Ins.	Ins.
Society Hill	65	16	38.3	5.04	T.	Lynville	73	15	39.4	4.20	T.	Nacogdoches	77	16	41.6	0.60	6.0
Spartanburg	71	20	45.1	2.86	T.	McKenzie	70°	14	40.9	2.64	T.	New Braunfels	81	23	46.7	4.86	
Statesburg	75	23	46.6	4.90		McMinnville	75	10	38.4	2.73	1.8	Panter	76	28	50.1	2.73	
Summerville	70	24	42.9	3.98		Maryville	71	11	38.0	2.40	1.0						
Temperance	69	19	44.0	3.09		Newport	72	12	38.0	1.71	4.0						
Trenton	75	16	46.2	5.92		Nunnelly	73	8	38.5	2.36							
Trial	65	18	39.6	2.40		Oakhill	67	8	36.2	1.77							
Walhalla	65	18	38.6	3.49	T.	Palmetto	73	14	39.8	3.75	T.						
Winnsboro	67	16	40.8	3.35	T.	Pope	75	9	39.5	3.18	T.						
Winthrop College	68	19	41.8	3.00		Rogersville	72	8	37.6	2.21	0.5						
Yorkville						Ruby	71	12	34.6	4.58	10.0						
<i>South Dakota</i> .						Savannah	75	13	41.4	3.33	T.						
Aberdeen	38	-18	11.0	0.40	4.0	Seawee...	69	9	36.5	2.20	2.0						
Academy	47	-11	20.4	0.08	0.8	Silverlake	64	7	33.2	3.09	10.8						
Alexandria	42	-15	14.5	T.	Springdale	71	8	37.4	2.57	2.0							
Armour	46	-13	16.6	0.10	1.0	Springville	74	7	41.6	2.09	1.8						
Ascroft	55	-13	24.2	0.53	5.3	Tazewell											
Bowdle	49	-20	13.6	0.20	2.0	Tellico Plains	73	11	40.5	2.50	T.						
Brookings	40	-17	13.8	0.10	1.0	Tracy City	70	8	36.6	2.84	4.0						
Canton	47	-10	21.0	T.	Tullahoma	72	13	40.4	3.16	T.							
Centerville					Union City	71	14	38.6	3.48	1.5							
Chamberlain	46	-12	19.8	0.04	0.8	Waynesboro	73	10	39.2	3.37	2.0						
Cherry Creek	52	-21	20.6	0.05	0.5	Wildersville	71	13	41.0	2.50	1.5						
Clark	44				Yukon	74 ²	13 ²	40.3 ²	3.28								
Doland	40	-22	13.6	0.37	3.7	<i>Texas</i> .											
Elkpoint	47	-8	22.4	0.27	0.8	Albany	74	20	44.8	2.12							
Fairfax	46	-12	20.4			Alvin											
Farmingdale						Arthur											
Faulkton	44	-16	13.2	0.11	2.0	Austin a.	80	25	51.1	1.50							
Flandreau	42	-15	15.6	0.13	1.5	Austin b*6	76	22	45.9	9.00							
Forestburg	42	-21	12.4	0.35	3.5	Ballinger	78	19	44.6	2.14							
Fort Meade	60	-3	29.4	0.50	0.5	Beaumont	82	22	52.1	4.51	T.	Callao	50 ^c	-2 ^c	29.2 ^c	0.50	0.8
Gann Valley	42	-16	16.3	0.50	5.0	Beeville	81	31	53.3	1.41		Castledale	49	-6	21.4	0.08	
Gettysburg	40	-12	10.6	0.17		Bigspring	77	17	44.2	0.81	1.8	Cisco	56	2	22.6	0.00	
Grand River School	54	-21	19.6	0.28	7.0	Blanco	72	24	45.8	3.26		Corinne	49 ^d	-4	28.0	3.62	13.3
Greenwood	48	-9	23.3	0.17	1.7	Boerne*1	77	20	47.2	3.35		Coyote	59 ^d	-8 ^d	19.8 ^d	0.01	0.1
Hightmore						Booth						Deseret	59	-8	29.0	0.94	1.0
Hoche City	42	-18	17.4	T.	Bowie	80	16	43.4	1.56		Emery	46	-2	26.2	T.		
Howell	43	-17	14.0	0.06	0.5	Brazoria	79	33	54.6	4.55		Escalante	51	-4	23.0	1.50	
Ipswich	44	-19	13.0	0.08	1.0	Coleman	84	20	48.4	1.73		Farmington	52	12	29.8	3.76	25.0
Kimball	45	-16	17.6	0.36	3.6	College Station	82	24	50.2	2.71		Fillmore	60	-2	33.5	1.44	
Leola	40	-23	8.2	0.20	2.0	Colorado	78	14	42.8	1.14	1.8	Frisco	62	5	32.3	0.75	
Marion	43	-14	18.4			Columbus	77	32	53.8	3.26		Giles	51	-10	18.8	0.10	
Mellette	44	-22	12.5	0.22	0.4	Comanche	81 ^d	15 ^d	46.2 ^d	2.30		Government Creek	48	-1	29.2	1.43	12.7
Menno	44	-15	18.5	0.18	2.0	Corsicana	82	27	51.8	2.80		Green River	45	-12	20.2	T.	T.
Millbank	45	-16	12.4	0.55		Childress	82	19	42.2	0.60	4.5	Grover	55	5	29.2	T.	T.
Mitchell	44	-15	15.9	0.40	4.0	Coleman	84	20	48.4	1.73		Heber	44	-6	24.2	2.17	13.2
Oelrichs	51	-9	26.2	0.60	5.0	College Station	82	24	50.2	2.71		Henefer	50	-12	25.3	2.91	27.5
Pedro	53	-12	22.2	T.	Colorado	78	14	42.8	1.14	1.8	Hite	60	13	34.4	0.30		
Pine Ridge	47	-24	22.4	0.42	3.5	Columbus	77	32	53.8	3.26		Huntsville	67	-7	22.7	34.0	
Plankinton	51 ^b	-16	18.8 ^b	0.15	1.5	Comanche	81 ^d	15 ^d	46.2 ^d	2.30		Ibahap	65	-15	29.2	0.25	2.5
Ramsey	42	-18	15.6	T.	Gatesville	82	25	50.0	2.70		Kelton	42	-2	22.8	0.60	6.0	
Redfield	55	-21	12.2	0.04	1.2	Georgetown	83	30	53.4	2.27		La Sal	47	4	25.0	0.60	6.0
Rosebud	48	-12	24.2	0.20	2.7	Grapevine	82	28	51.0	4.07		Levan	45	0	26.0	1.64	11.8
Silver City					Greenville	78	18	43.8	2.15		Loa	43	-19	15.2	0.60	6.0	
Sioux Falls	41	-14	17.0	0.20		Haneyevang	79	28	52.8	2.55		Logan	47	6	27.2	2.62	
Sisseton Agency	42	-20	13.0	0.69	6.0	Dublin	79	19	43.1	1.10		Lund	53	5	31.2	0.25	2.0
Spearfish	62	-1	31.4	0.52	3.2	Duval	83	23	49.3	1.58		Manti	50	5	27.8	0.73	T.
Tyndall	43	-12	18.8	0.18		Estelle	81	18	44.6	2.04		Marysville	52	1	28.9	0.40	1.5
Vermillion	57	-9	21.4	T.	Fort Brown	87	37	59.6	2.35		Meadowville	46	-5	23.0	4.10	28.0	
Watertown	41	-20	12.1	0.15	1.5	Fort Clark	77	22	46.6	2.60		Millville					
Waubay	40	-23	10.8	0.28		Fort Davis	77	17	43.4	1.38	5.0	Minersville	65 ^a	7	33.3	0.14	T.
Wentworth	38	-18	14.8	0.67	5.3	Fort McIntosh	87	31	55.0	3.42		Moab	59	3	27.0	0.12	T.
Wolsey				0.15	1.5	Fort Ringgold	91	32	59.1	2.80		Monticello	44	1	26.2	T.	
<i>Tennessee</i> .						Fort Stockton						Morgan					
Andersonville	66	8	36.2	2.40	T.	Fredericksburg	79 ^e	22 ^e	47.4 ^e	3.06		Mount Nebo	58	5	28.1	1.37	7.0
Ashwood	77	13	40.2	3.22	T.	Gainesville	82	15	42.4	1.62		Mount Pleasant	50	0	27.2	1.24	11.0
Benton	73	10	39.4	2.93	T.	Gatesville	83	19	47.7	2.33		Ogden	50	9	28.7	4.77	16.1
Bluff City						Georgetown	84	23	50.2	1.58		Park City	49	1	27.1	3.88	38.8
Bolivar	72	14	38.2	3.20	T.	Grapevine	82	21	44.8	2.39		Parowan	57	7	30.9	1.10	10.0
Bristol	65	9	33.6	2.86	T.	Greenville	77	17	42.9	1.62		Pinto	61 ^d	3 ^d	30.0 ^d	0.93	
Byrdstown	72	9	37.7	2.95	1.0	Hale Center	76	16	43.5	0.12	1.2	Plateau	50	-9	24.0	1.09	12.5
Carthage	72	12	39.4	2.71	0.8	Hallettsville	82	29	53.1	3.34		Provo	58	-1	29.9	2.65	8.9
Charleston						Haskell	77	19	43.4	1.15	2.0	Ranch	48	1	25.2	1.03	
Clarksville	71	13	38.2	2.56	2.5	Hearne	84	22	50.8	3.55		Richfield	57	3	30.3	0.60	
Clinton						Henrietta	79	19	42.5	1.83		St. George	66	13	38.7	0.27	
Covington	71	15	39.6	4.27	T.	Hewitt						Scipio	57	-10			

TABLE II.—Climatological record of voluntary and other cooperating observers—Continued.

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
Vermont—Cont'd.	°	°	°	Ins.	Ins.	Washington—Cont'd.	°	°	°	Ins.	Ins.	Wisconsin—Cont'd.	°	°	°	Ins.	Ins.
St. Johnsbury.....	40	-27	16.0	3.24	18.0	Trinidad.....	46	12	28.8	0.54	5.0	New London.....	40	-14	14.4	0.61	5.0
Wells.....	44	-18	18.6	7.0	.....	56°	30°	40.8°	15.22	10.4	North Crandon.....	35	-21	11.2	.....	.....
Wells River.....	.....	.....	3.07	11.0	.....	43	8	28.8	4.34	16.5	Oconto.....	41	-13	17.1	1.23	13.0	
White River Junction.....	.....	.....	3.08	11.2	.....	56	25	41.6	5.29	T.	Osceola.....	38	-24	9.2	0.67	7.0	
Woodstock.....	55	-21	20.2	3.11	16.0	Vashon.....	55	30	32.1	6.46	.....	Oshkosh.....	41	-11	19.8	0.39	2.0
Virginia.....	.....	.....	5.14	0.5	.....	45	4	23.4	2.10	18.5	Pine River.....	42	-14	15.7	0.36	8.7	
Alexandria.....	56	11	33.7	4.18	1.7	Waterville.....	49	10	27.8	1.87	12.0	Portage.....	43	-10	19.0	0.15	1.0
Ashland.....	63	13	35.4	4.50	0.5	Wenatchee (near).....	57	25	41.5	4.11	1.0	Port Washington.....	44	-10	20.2	0.95	8.0
Barboursville.....	65	12	36.5	5.04	1.2	Whatecom.....	41	4	25.8	1.91	6.0	Prairie du Chien a.....	53	-7	23.7	0.22	2.5
Bedford.....	65	12	36.2	5.14	0.5	Zindel.....	55	22	37.4	1.08	.....	Prairie du Chien b.....	.....	.....	0.36	4.5	
Big Stone.....	68	4	35.8	2.42	1.5	West Virginia.....	.....	.....	.....	.....	.....	Prentice.....	41	-21	11.6	0.45	4.5
Blacksburg.....	63	6	32.5	3.96	1.8	Addison.....	70	5	33.2	3.00	6.0	Racine.....	45	-8	23.0	0.57	.....
Bonair.....	63	8	36.1	4.01	0.5	Bayard.....	60	-3	24.8	4.38	6.5	Sheboygan.....	41	-9	21.9	1.43	13.0
Buckingham.....	66	10	36.4	4.66	2.0	Beverly.....	64	3	29.7	4.69	15.0	Spooner.....	36	-22	10.5	0.62	6.7
Burkes Garden.....	59	1	29.7	3.20	7.0	Bluefield.....	65	8	34.6	5.30	20.0	Stevens Point.....	39	-19	13.8	0.40	3.5
Callaville.....	63	16	37.3	2.90	.....	Buckhannon.....	68	0	31.6	3.41	8.0	Tomahawk.....	42	-28	9.2	1.20	12.0
Charlottesville.....	65	12	35.7	5.12	1.7	Burlington.....	50	-2	28.2	3.35	11.0	Valley Junction.....	43	-11	17.0	0.04	1.0
Clarksville.....	.....	.....	2.84	.....	.....	Byrne.....	75	5	32.8	4.50	8.0	Viroqua.....	40	-12	16.4	0.38	3.6
Columbia.....	64	8	33.0	3.60	2.0	Canaden.....	68	-4	33.2	2.45	13.6	Watertown.....	42	-11	18.4	0.79	8.0
Dale Enterprise.....	64	5	31.6	4.26	10.0	Central b.....	72	1	23.6	2.09	7.3	Waukesha.....	41	-9	20.2	0.48	4.7
Danville.....	.....	.....	3.71	T.	Charleston.....	.....	.....	.....	.....	.....	Waupac.....	38	-15	14.3	0.41	7.6	
Farmville.....	67	15	38.2	4.50	T.	Glenville.....	74	-5	31.4	3.64	10.0	Wausau.....	37	-12	13.7	0.47	.....
Fredericksburg *	54	14	33.2	2.97	1.0	Grafton.....	70	3	32.5	2.95	7.5	Whitehall.....	50	-21	16.4	0.22	2.2
Grahams Forge.....	61°	8°	32.6°	3.93	6.0	Hinton b.....	60	1	32.1	2.55	7.0	Wyoming.....	.....	.....	.....	.....	.....
Hampton.....	61	18	40.6	3.48	T.	Dayton.....	70	-2	32.0	2.51	5.5	Alcova.....	52	0	28.2	0.92	8.5
Hot Springs.....	61	5	30.0	4.70	9.0	Echo.....	79	5	34.6	2.92	3.5	Basin.....	53	-7	22.2	T.	T.
La Crosse.....	65	11	37.8	3.50	T.	Elkhorn.....	67	7	35.6	2.40	8.0	Bedford.....	40	-16	16.8	2.63	19.1
Lexington.....	62	10	33.8	4.70	5.3	Fairmont.....	.....	.....	.....	.....	.....	Border.....	41	-27	8.9	2.34	.....
Lincoln.....	50	9	31.5	3.73	3.0	Glenville.....	74	-5	31.4	3.64	10.0	Buffalo.....	58	-4	26.1	0.35	6.6
Mendota.....	.....	.....	2.51	1.0	.....	70	3	32.6	2.57	5.8	Centennial.....	42	-10	24.6	1.38	.....
Newport News.....	62	11	40.2	3.65	.....	Green Sulphur.....	56	5	31.1	2.81	6.0	Chugwater.....	54	1	30.2	0.50	4.5
Petersburg.....	58	16	36.9	2.72	T.	Harpers Ferry.....	.....	.....	.....	.....	.....	Daniel.....	41	-27	15.4	1.85	18.5
Radford.....	.....	.....	2.86	4.0	.....	Hinton b.....	64	8	33.6	3.49	7.7	Evanston.....	43	-10	22.0	2.14	17.0
Riverton.....	.....	.....	4.00	2.0	.....	Huntington.....	72	8	33.2	2.46	0.8	Fort Laramie.....	60	0	30.3	0.02	1.0
Roanoke.....	56	7	33.0	4.20	6.4	Josiah.....	69	4	31.6	3.86	14.0	Fort Washakie.....	60	-8	25.2	0.20	2.0
Rockymount.....	61	12	33.4	4.96	2.8	Lewisburg.....	62	5	29.9	3.74	10.5	Fort Yellowstone.....	45	-1	22.6	0.60	6.0
Saxe.....	63	11	37.7	4.01	T.	Moundsville.....	66	7	33.2	2.96	4.9	Fourbear.....	52	-7	27.2	0.32	7.5
Shenandoah.....	.....	.....	4.50	5.0	.....	.....	.....	.....	.....	.....	Griggs.....	53	-16	26.5	1.30	13.0	
Speers Ferry.....	.....	.....	2.72	1.0	.....	Logan.....	75	8	37.8	3.74	5.0	Hyattville.....	56	1	28.5	.....	.....
Spottsville.....	64	15	39.2	3.09	T.	Magnolia.....	50	-2	27.8	3.19	12.0	Irma.....	60	0	33.1	0.60	6.0
Standardsville.....	62	0	28.2	2.55	5.0	Martinsburg.....	54	5	29.2	2.95	5.0	Iron Mountain.....	47	5	28.8	0.03	.....
Staunton.....	64	11	34.6	4.06	7.0	Morgantown.....	68	1	31.7	2.87	8.0	Laramie.....	44	-3	23.3	0.11	1.5
Warsaw.....	58	11	35.4	2.65	1.0	Moundsville.....	60	-2	28.4	2.00	7.0	Leo.....	43	-16	21.0	0.83	9.8
Westpoint.....	61	10	34.4	3.80	T.	New Martinsville.....	69	2	32.6	3.00	9.5	Lolabama Ranch.....	44	-5	23.0	0.69	10.0
Wilkerston.....	60	14	35.5	3.63	2.3	Nuttallburg.....	70	5	36.1	2.90	16.0	Lusk.....	48	0	25.8*	0.38	3.8
Williamsburg.....	62	13	39.0	2.47	T.	Oldfields.....	55	0	31.1	2.58	8.0	Moore.....	48	-2	29.1	0.07	2.4
Woodstock.....	60	5	29.6	2.95	4.5	Parsons.....	65	4	31.5	2.80	14.0	Parkman.....	57	-5	28.4*	0.32	4.5
Wytheville.....	64	8	31.9	3.43	7.5	Philippe.....	71	-2	32.4	4.72	7.0	Pinebluff.....	53	2	29.0	T.	T.
Washington.....	.....	.....	3.20	.....	.....	Pickens.....	66	1	30.4	6.45	29.0	Rawlins.....	52	-6	23.0	1.33	13.3
Anacortes.....	.....	.....	.....	.....	.....	Point Pleasant.....	73	7	31.8	2.65	2.0	Rocksprings.....	16	0	0.78	0.78	7.8
Ashford.....	56	26	39.1	5.64	2.2	Powellton.....	74	8	35.6	1.79	9.4	Saratoga.....	44	-5	22.3	1.20	12.0
Blaine.....	56	26	38.8	7.70	9.0	Princeton.....	62	7	32.4	4.25	12.5	South Pass City.....	42	-20	15.2	.....	.....
Bremerton.....	59	28	40.8	5.70	9.0	Romney.....	52	1	29.8	3.08	6.0	Thayne.....	38	-18	14.9	2.65	21.9
Brinmon.....	55	29	40.8	8.32	6.0	Rowlesburg.....	.....	.....	.....	.....	.....	Thermopolis.....	48	-5	20.8	0.10	1.0
Cedonia.....	42	9	26.6	1.99	12.7	Ryan.....	75	-3	33.4	2.78	3.0	Wheatland.....	47	3	27.8	0.60	6.0
Centralia.....	57	28	41.6	10.38	2.2	Southside.....	74	10	35.7	2.96	2.5	Porto Rico.....	.....	.....	.....	.....	.....
Cheney.....	.....	.....	2.36	15.0	.....	Terra Alta.....	62	-3	25.8	5.60	24.0	Adjuntas.....	88	48	69.8	2.06	.....
Clearwater.....	58	28	41.6	18.50	13.7	Travellers Repose.....	54	-7	25.4	4.53	23.0	Aguadilla.....	91	59	75.8	0.20	.....
Cle Elum.....	46	8	29.0	7.36	28.0	Uppertract.....	64	6	31.4	2.62	6.0	Aguirre.....	86	64	76.1	0.67	.....
Colfax.....	51	6	32.5	4.30	7.0	Wellsburg.....	61	-1	28.0	2.94	9.0	Arecibo.....	87	59	73.0	1.53	.....
Colville.....	44	5	27.8	2.60	16.5	Weston a.....	.....	.....	.....	.....	.....	Barros.....	81	51	68.7	0.10	.....
Connell.....	.....	.....	1.00	2.5	.....	Wheeling a.....	66	4	33.5	2.14	4.0	Bayamon.....	90	59	74.8	0.97	.....
Connelly.....	44	4	24.8	1.44	13.6	Wheeling b.....	66	-2	32.4	2.14	4.0	Caguas.....	89	50	72.7	1.92	.....
Coupeville.....	55	30	41.4	1.64	0.5	Williamson.....	75	8	34.2	2.74	2.0	Cayey.....	88	12	70.8	1.37	.....
Crescent.....	42	8	28.4	2.43	8.5	.....	.....	.....	.....	.....	.....	Cidra.....	87	50	70.6	3.10	.....
East Sound.....	.....	.....	4.60	T.	.....	Amherst.....	37	-10	13.0	0.35	3.5	Coamo.....	88	62	74.7	T.	.....
Ellensburg.....	45	12	27.7	0.67	1.6	Antigo.....	38	-16	11.8	0.30	3.0	Fajardo.....	85	66	77.3	1.33	.....
Grandinound.....	57	26	41.6	10.20	1.6	Appleton.....	39	-12	15.6	1.29	8.8	Guanica.....	90	59	74.8	0.70	1.29
Granite Falls.....	.....	.....	3.59	.....	.....	Ashtland.....	46	-22	11.8	0.59	5.9	Guayanana.....	.....	.....	.....	.....	.....
Hooper.....	56	11	34.8	1.44	2.0	Beloit.....	43	-6	21.2	0.57	3.5	Hacienda Amistad.....	88	53	72.7	1.30	.....
Illwaco.....	57	31	43.6	17.22	3.0												

TABLE II.—*Climatological record of voluntary and other cooperating observers and late reports for December, 1902—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>Alaska.</i>											
Coal Harbor.....	◦	◦	◦	In.	In.	Ashton.....	◦	◦	◦	In.	In.
Copper Center.....	35	-53	12.4	1.20	10.5	North Dakota.....				8.5	
Fort Egbert.....	28	-59	21.4	0.51	7.3	Elbowoods.....	40	-27	-0.3	0.80	8.0
Fort Gibbon.....	25	-64	19.8	1.36	38.2	Austin b* ⁶	73	28	47.4	.....
Fort Liscom.....	41	-12	16.8	4.43	83.1	Logan.....	55	9	29.2	1.02	.....
Fort Yukon.....	.....	-62	.....	0.75	7.5	Washington.....					
Juneau.....	40	8	23.5	4.26	.....	Ritzville (near).....				2.46	11.0
Kenai.....	35	-43	0.2	1.55	23.5	Wisconsin.....					
Skagway.....	45	-2	16.0	1.44	27.2	Prairie du Chien b.....				3.08	14.5
<i>Arkansas.</i>						Wyoming.....					
Lonoke.....	68	16	41.2	5.17	T.	Parkman.....	59 ¹	-8 ⁴	24.1 ⁴	0.15	3.0
<i>California.</i>						Thayne.....	45	-18	16.8	1.42	11.4
Caliente* ¹	66	31	43.6	0.13		Porto Rico.....					
Claremont.....	81	28	49.4	2.61		Hacienda Amistad.....	91	56	73.8	4.28	
Mutah Flat.....				2.25	18.0						
San Miguel Island.....	66	41	52.6	3.60							
Santa Paula.....	81	38	59.3	1.16							
Snedden.....				1.56	10.0						
Ventura.....				2.96							
<i>Idaho.</i>											
Chesterfield.....	45	-17	20.0	1.07	11.0						
Roosevelt.....	44	0	21.8	5.47	41.7						
<i>Indiana.</i>											
Winamac.....	48	4	26.8	.....						
<i>Iowa.</i>											
Fayette.....	44	-16	18.0	2.76	22.0						
<i>Kansas.</i>											
Russell.....	58	-11	25.4	0.85	8.5						
<i>Kentucky.</i>											
Richmond.....	62	11	35.6	7.67							
<i>Maryland.</i>											
Pocomoke City ^c	64	18	38.5	.....						
<i>Massachusetts.</i>											
Lowell b.....	52	-13	25.5	.....						
<i>Missouri.</i>											
Halfway.....	61 ⁴	15 ⁴	35.8 ⁴	2.35	3.0						

EXPLANATION OF SIGNS.

*Extremes of temperature from observed readings of dry thermometer.

A numeral following the name of a station indicates the hours of observation from which the mean temperature was obtained, thus:

¹Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4.

²Mean of 8 a. m. + 8 p. m. + 2.

³Mean of 7 a. m. + 7 p. m. + 2.

⁴Mean of 6 a. m. + 6 p. m. + 2.

⁵Mean of 7 a. m. + 2 p. m. + 2.

⁶Mean of readings at various hours reduced to true daily mean by special tables.

The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.

An italic letter following the name of a station, as "Livingston a," "Livingston b," indicates that two or more observers, as the case may be, are reporting from the same station. A small roman letter following the name of a station, or in figure columns, indicates the number of days missing from the record; for instance "n" denotes 14 days missing.

No note is made of breaks in the continuity of temperature records when the same do not exceed two days. All known breaks, of whatever duration, in the precipitation record receive appropriate notice.

CORRECTIONS.

December, 1902, Arkansas, Forrest City, make maximum and mean temperature 69° and 40.2° instead of 82° and 40.8°, respectively; Russellville, make maximum and mean temperature 68°¹ and 38.8°¹ instead of 86°¹ and 39.2°¹, respectively; Washington, Port Townsend, make precipitation 3.23 instead of 3.10. November, 1902, Michigan, East Tawas, make mean temperature 43.7° instead of 48.7°. October, 1902, Indian Territory, Fort Apache, strike out all values. October, 1902, Louisiana, Port Eads, make mean temperature 74.0° instead of 75.7°.

The following changes have been made in names of stations: California, Edmonton to Meadow Valley; Kono Tayee to Lakeport (near); North Ontario to Upland; Pomona (near) to Ontario; Colorado, Arkans to Waterdale; Idaho, Thunder Mountain to Roosevelt; New York Wolcott to South Butler; New Mexico, Folsom to Eagle Rock Ranch; Las Vegas Hot Springs to Hot Springs; Washington, Ellensburg (near) to South Ellensburg. —

† The temperature rose higher than has been previously recorded at Alhajuela during any January, and the barometer ranged both higher and lower as well. The rainfall throughout the Isthmus was also very light.

TABLE III.—Resultant winds from observations at 8 a. m. and 8 p. m., daily, during the month of January, 1903.

Stations.	Component direction from—				Resultant.		Stations.	Component direction from—				Resultant.		
	N.	S.	E.	W.	Direction from—	Duration.		N.	S.	E.	W.	Direction from—	Duration.	
<i>New England.</i>														
Eastport, Me.	Hours.	Hours.	Hours.	Hours.	o	Hours.	Moorhead, Minn.	Hours.	Hours.	Hours.	o	Hours.		
Portland, Me.	17	12	7	42	n. 82 w.	35	Bismarck, N. Dak.	26	17	25	n. 42 w.	12		
Concord, N. H.	18	18	4	38	s. 82 w.	34	Williston, N. Dak.	28	9	17	n. 12 w.	19		
Northfield, Vt.	17	6	7	11	n. 20 w.	12		17	23	22	s. 56 w.	11		
Boston, Mass.	20	36	3	11	s. 27 w.	18								
Nantucket, Mass.	11	17	7	40	s. 80 w.	34	<i>Upper Mississippi Valley.</i>							
Block Island, R. I.	13	13	8	41	w.	33	Minneapolis, Minn.*	9	7	8	14	n. 72 w.	6	
Narragansett, R. I.†	17	15	6	38	n. 87 w.	32	St. Paul, Minn.	22	19	15	n. 76 w.	12		
New Haven, Conn.	10	8	3	18	n. 82 w.	15	La Crosse, Wis. †	13	11	4	10	n. 72 w.	6	
	31	7	9	26	n. 35 w.	29	Davenport, Iowa.	9	19	13	32	s. 62 w.	22	
<i>Middle Atlantic States.</i>							Des Moines, Iowa.	22	22	12	24	w.	12	
Albany, N. Y.	17	30	3	22	s. 56 w.	23	Dubuque, Iowa.	21	22	12	27	s. 86 w.	15	
Binghamton, N. Y.†	4	5	7	17	s. 84 w.	10	Keokuk, Iowa.	19	22	12	27	s. 79 w.	15	
New York, N. Y.	12	15	11	38	s. 84 w.	27	Cairo, Ill.	17	26	12	22	s. 48 w.	14	
Harrisburg, Pa.	16	8	14	35	n. 69 w.	22	Springfield, Ill.	20	21	7	29	s. 87 w.	22	
Philadelphia, Pa.	18	9	12	35	n. 69 w.	25	Hannibal, Mo. †	11	9	4	14	n. 79 w.	10	
Scranton, Pa.	15	26	9	35	s. 67 w.	28	St. Louis.	15	25	8	26	s. 61 w.	21	
Atlantic City, N. J.	20	11	9	36	n. 72 w.	28	<i>Missouri Valley.</i>							
Cape May, N. J.	18	12	6	37	n. 79 w.	32	Columbia, Mo. *	7	12	5	14	s. 61 w.	10	
Baltimore, Md.	18	12	9	36	n. 78 w.	28	Kansas City, Mo.	21	25	10	20	s. 68 w.	11	
Washington, D. C.	21	18	6	30	n. 83 w.	24	Springfield, Mo.	18	21	12	27	s. 79 w.	15	
Lynchburg, Va.	17	17	9	34	w.	25	Topeka, Kans.*	12	12	3	8	w.	5	
Norfolk, Va.	16	19	16	25	s. 72 w.	10	Lincoln, Nebr.	21	24	8	25	s. 80 w.	17	
Richmond, Va.	16	19	12	27	s. 79 w.	15	Omaha, Nebr.	20	26	6	23	s. 71 w.	18	
Wytheville, Va.	9	12	12	43	s. 84 w.	31	Valentine, Nebr.	20	9	6	42	n. 73 w.	38	
<i>South Atlantic States.</i>							Sioux City, Iowa †	12	11	4	14	n. 84 w.	10	
Asheville, N. C.	30	21	9	15	n. 34 w.	11	Pierre, S. Dak.	19	16	23	16	s. 67 e.	8	
Charlotte, N. C.	20	14	15	27	n. 63 w.	13	Huron, S. Dak.	24	21	15	22	n. 67 w.	8	
Hatteras, N. C.	21	10	14	20	n. 29 w.	12	Yankton, S. Dak. †	11	7	6	16	n. 68 w.	11	
Raleigh, N. C.	23	11	9	32	n. 62 w.	26	<i>Northern Slope.</i>							
Wilmington, N. C.	20	17	11	29	n. 81 w.	18	Havre, Mont.	14	14	10	38	w.	28	
Charleston, S. C.	20	16	10	28	n. 77 w.	18	Miles City, Mont.	19	26	4	24	s. 71 w.	21	
Columbia, S. C.	17	19	12	29	s. 83 w.	17	Helena, Mont.	16	24	5	35	s. 75 w.	31	
Augusta, Ga.	23	14	15	28	n. 55 w.	16	Kalispell, Mont.							
Savannah, Ga.	21	10	12	31	n. 60 w.	22	Rapid City, S. Dak.	26	7	8	37	n. 57 w.	35	
Jacksonville, Fla.	24	17	12	21	n. 52 w.	11	Cheyenne, Wyo.	24	8	0	42	n. 69 w.	45	
<i>Florida Peninsula.</i>							Lander, Wyo.	11	25	18	23	s. 20 w.	15	
Jupiter, Fla.	20	18	16	23	n. 74 w.	7	North Platte, Nebr.	12	17	6	41	s. 82 w.	35	
Key West, Fla.	30	8	31	9	n. 45 e.	31	<i>Middle Slope.</i>							
Tampa, Fla.	29	11	22	16	n. 18 e.	19	Denver, Colo.	15	32	10	19	s. 28 w.	19	
<i>Eastern Gulf States.</i>							Pueblo, Colo.	23	12	19	24	n. 24 w.	12	
Atlanta, Ga.	24	14	14	29	n. 56 w.	18	Concordia, Kans.	20	24	10	21	s. 70 w.	12	
Macon, Ga.†	14	5	6	12	n. 34 w.	11	Dodge, Kans.	23	17	11	24	n. 65 w.	14	
Pensacola, Fla.†	19	4	11	8	n. 11 e.	15	Wichita, Kans.	25	23	10	16	n. 72 w.	6	
Mobile, Ala.	34	16	9	15	n. 18 w.	19	Oklahoma, Okla.	23	23	6	17	w.	11	
Montgomery, Ala.	20	14	19	21	n. 18 w.	6	<i>Southern Slope.</i>							
Meridian, Miss.†	10	6	8	13	n. 51 w.	6	Abilene, Tex.	17	28	8	20	s. 47 w.	16	
Vicksburg, Miss.	19	20	21	17	s. 76 e.	4	Amarillo, Tex.	24	25	6	22	s. 87 w.	16	
New Orleans, La.	24	18	19	16	n. 27 e.	7	<i>Southern Plateau.</i>							
<i>Western Gulf States.</i>							El Paso, Tex.	25	5	13	37	n. 50 w.	31	
Shreveport, La.	17	19	22	20	s. 45 e.	3	Santa Fe, N. Mex.	35	13	17	11	n. 15 e.	23	
Fort Smith, Ark.	15	8	29	22	n. 45 e.	10	Flagstaff, Ariz.	21	11	17	24	n. 35 w.	12	
Little Rock, Ark.	16	21	10	27	s. 74 w.	18	Phoenix, Ariz.	11	12	29	21	s. 83 e.	8	
Corpus Christi, Tex.	22	19	18	16	n. 34 e.	4	Yuma, Ariz.	40	6	17	9	n. 13 e.	35	
Fort Worth, Tex.	21	26	12	18	s. 39 e.	6	<i>Independence, Cal.</i>							
Galveston, Tex.	20	17	21	16	n. 59 e.	6	<i>Middle Plateau.</i>							
Palestine, Tex.	23	20	15	17	n. 34 w.	4	Carson City, Nev.	9	29	15	26	s. 29 w.	23	
San Antonio, Tex.	22	22	15	19	w.	17	Winnemucca, Nev.	18	16	21	25	n. 63 w.	4	
Taylor, Tex.†	13	12	3	10	n. 82 w.	7	Modena, Utah.	17	9	20	26	n. 37 w.	10	
<i>Ohio Valley and Tennessee.</i>							Salt Lake City, Utah.	15	27	25	16	s. 37 e.	21	
Chattanooga, Tenn.	18	19	13	23	s. 84 w.	10	Grand Junction, Colo.	10	20	32	14	s. 61 e.	21	
Knoxville, Tenn.	13	27	5	35	s. 65 w.	33	<i>Northern Plateau.</i>							
Memphis, Tenn.	21	24	15	19	s. 53 w.	5	Baker City, Oreg.	8	40	22	15	s. 12 e.	33	
Nashville, Tenn.	16	21	17	24	s. 54 w.	9	Boise, Idaho.	18	13	16	27	n. 66 w.	12	
Lexington, Ky.†	4	17	7	12	s. 21 w.	14	Lewiston, Idaho †	3	7	17	5	s. 72 e.	13	
Louisville, Ky.	8	30	10	24	s. 32 w.	26	Pocatello, Idaho.	1	17	29	23	s. 21 e.	17	
Evansville, Ind.†	7	11	8	10	s. 27 w.	4	Spokane, Wash.	16	28	15	17	s. 9 w.	12	
Indianapolis, Ind.	11	28	14	24	s. 30 w.	20	Walla Walla, Wash.	6	36	9	23	s. 25 w.	33	
Cincinnati, Ohio.	7	22	17	31	s. 43 w.	20	<i>North Pacific Coast Region.</i>							
Columbus, Ohio.	8	26	13	29	s. 42 w.	24	North Head, Wash.	7	31	26	13	s. 28 e.	27	
Pittsburg, Pa.	26	15	12	32	n. 61 w.	23	Port Crescent, Wash. *	0	13	16	9	s. 28 e.	15	
Parkersburg, W. Va.	13	25	11	25	s. 49 w.	18	Seattle, Wash.	13	31	29	1	s. 57 e.	33	
Elkins, W. Va.	9	21	5	37	s. 69 w.	34	Tacoma, Wash.	11	38	11	22	s. 22 w.	29	
<i>Lower Lake Region.</i>							Tatoosh Island, Wash.	9	25	28	11	s. 47 e.	23	
Buffalo, N. Y.	4	18	7	40	s. 67 w.	36	Astoria, Oreg.	15	23	30	12	s. 66 e.	20	
Oswego, N. Y.	13	31	9	21	s. 34 w.	22	Roseburg, Oreg.	10	24	25	17	s. 30 e.	16	
Rochester, N. Y.	6	27	8	35	s. 52 w.	34	<i>Middle Pacific Coast Region.</i>							
Syracuse, N. Y.	9	28	12	25	s. 34 w.	23	Eureka, Cal.	12	30	20	16	s. 13 e.	18	
Erie, Pa.	12	24	4	33	s. 68 w.	31	Mount Tamalpais, Cal.	30	12	10	26	n. 42 w.	24	
Cleveland, Ohio.	4	35	15	25	s. 68 w.	31	Red Bluff, Cal.	19	24	27	6	s. 77 e.	22	
Sandusky, Ohio.†	3	13	4	17	s. 52 w.	16	Sacramento, Cal.	15	27	24	8	s. 53 e.	20	
Toledo, Ohio.	9	29	9	31	s. 48 w.	30	Point Reyes Light, Cal. *	16	9	8	11	n. 23 w.	8	
Detroit, Mich.	12	21	7	36	s. 73 w.	30	<i>South Pacific Coast Region.</i>							
<i>Upper Lake Region.</i>							Fresno, Cal.	21	13	23	19	n. 27 e.	9	
Alpena, Mich.	14	14	7	36	w.	29	Los Angeles, Cal.	20	10	23	23	n. 27 e.	10	
Escanaba, Mich.	19	14	4	37	n. 81 w.	33	San Diego, Cal.	29	7	24	21	n. 8 e.	22	
Grand Haven, Mich.	16	20	19	22	s. 37 w.	5	San Luis Obispo, Cal.	34	11	1	18	n. 36 w.	29	
Marquette, Mich.	15	14	4	36	n. 88 w.	32	<i>West Indies.</i>							
Houghton, Mich.†	12	3	10	12	n. 13 w.	9	Basseterre St. Kitts, W. I.							
Port Huron, Mich.	12	20	8	35	s. 73 w.	28	Bridge Town, Barbados.	11	0	58	0	n. 79 e.	59	
Sault Ste. Marie, Mich.	16	19	24	19	s. 59 e.	6	Havana, Cuba. †	3	6	21	2	s. 81 e.	19	
Chicago, Ill.	14	20	6	31	s. 77 w.	26	Puerto Principe, Cuba.	25	7	25	9	n. 42 e.	24	
Milwaukee, Wis.	14	13	5	39	n. 88 w.	34	San Juan, Porto Rico.	1	27	45	1	s. 60 e.	51	
Green Bay, Wis.	17	26	9	28	s. 65 w.	21	Santiago de Cuba, Cuba.							
Duluth, Minn.	19	16	8	36	n. 84 w.	28								

* From observations at 8 p. m. only. † From observations at 8 a. m. only.

TABLE IV.—*Thunderstorms and auroras, January, 1903.*

States.	No. of stations.	Total.																																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	No.	Days		
Alabama	52	T.																																14	3	T.
Arizona	56	T.																															0	0	A.	
Arkansas	57	T.																														0	0	A.		
California	167	T.																														6	6	T.		
Colorado	81	T.																														0	0	A.		
Connecticut	21	T.																														1	1	T.		
Delaware	5	T.																														0	0	T.		
Dist. of Columbia..	4	T.																														0	0	T.		
Florida	47	T.	1																													54	14	A.		
Georgia	55	T.																														9	3	T.		
Idaho	34	T.																														0	0	T.		
Illinois	92	T.																														0	0	T.		
Indiana	58	T.	4																												4	1	T.			
Indian Territory...	11	T.																													7	2	T.			
Iowa	149	T.																													0	0	T.			
Kansas	77	T.																													1	1	A.			
Kentucky	41	T.	1																												0	2	T.			
Louisiana	46	T.																													39	9	T.			
Maine	19	T.																													0	0	T.			
Maryland	48	T.																													0	0	T.			
Massachusetts	48	T.																													19	1	T.			
Michigan	106	T.																													11	4	T.			
Minnesota	67	T.																													0	0	T.			
Mississippi	44	T.																													27	8	T.			
Missouri	95	T.																													3	2	T.			
Montana	40	T.																													0	0	T.			
Nebraska	142	T.																													1	1	A.			
Nevada	40	T.																													0	0	A.			
New Hampshire	19	T.																													1	1	T.			
New Jersey	51	T.																													0	0	A.			
New Mexico	31	T.																													0	0	A.			
New York	99	T.	1																												40	5	T.			
North Carolina	56	T.	4																												11	5	T.			
North Dakota	48	T.																													0	0	T.			
Ohio	128	T.	1	1																										2	2	A.				
Oklahoma	23	T.																													8	3	T.			
Oregon	74	T.																													3	2	T.			
Pennsylvania	91	T.																													1	5	T.			
Rhode Island	7	T.																													1	1	A.			
South Carolina	46	T.	2																												12		T.			
South Dakota	56	T.																													23	5	T.			
Tennessee	56	T.	1																												0	0	T.			
Texas	95	T.																													15	5	T.			
Utah	47	T.																													0	0	A.			
Vermont	16	T.																													0	0	T.			
Virginia	50	T.																													1	1	T.			
Washington	64	T.																													0	0	T.			
West Virginia	43	T.																													3	2	T.			
Wisconsin	60	T.																													1	1	A.			
Wyoming	31	T.																													0	0	A.			
Sums	2,893	T.	2	12	1	0	0	1	11	1	1	11	14	0	0	0	0	0	0	2	14	0	1	0	1	0	0	0	1	0	0	0	0	T.		
		A.	1	1	0	1	0	0	0	0	2	0	0	0	2	14	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	A.	

TABLE V.—Accumulated amounts of precipitation for each 5 minutes, for storms in which the rate of fall equaled or exceeded 0.25 in any 5 minutes, or 0.75 in 1 hour during January, 1903, at all stations furnished with self-registering gages.

Stations.	Date.	Total duration.		Total amount of precipitation.	Excessive rate.		Amount before excessive began.	Depths of precipitation (in inches) during periods of time indicated.													
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
Albany, N. Y.	1 2-3	2	3	4 0.48	5	6	7													*	
Alpena, Mich.	28-29			0.86																*	
Asheville, N. C.	2			0.56															0.18		
Atlanta, Ga.	27			0.68															0.29		
Atlantic City, N. J.	2-3			1.36															0.68		
Augusta, Ga.	27			1.44															0.53		
Baltimore, Md.	2-3			1.58															*		
Binghamton, N. Y.	21			0.93															*		
Bismarck, N. Dak.	27-28			0.74															*		
Block Island, R. I.	11			1.25															*		
Bolse, Idaho.	21-22			1.42															0.11		
Boston, Mass.	21			1.14															0.40		
Buffalo, N. Y.	2-3			0.51															0.11		
Cairo, Ill.	1-2			1.17															0.23		
Charleston, S. C.	2			1.03															0.69		
Charlotte, N. C.	1-2			1.27															0.36		
Chattanooga, Tenn.	1-2			0.62															0.24		
Chicago, Ill.	2-3			0.35															*		
Cincinnati, Ohio.	2			0.86															0.24		
Cleveland, Ohio.	2-3			0.42															0.06		
Columbia, Mo.	1-2			0.74															0.08		
Columbia, S. C.	2	D. N.	7:30 p. m.	1.32	12:50 p. m.	1:20 p. m.	0.27	0.05	0.17	0.42	0.66	0.74	0.92	0.96					0.21		
Columbus, Ohio.	2-3			0.82															0.38		
Corpus Christi, Tex.	15-16			0.62															*		
Davenport, Iowa.	2-3			0.46															*		
Denver, Colo.	10-11			0.10															*		
Des Moines, Iowa.	10-11			0.06															*		
Detroit, Mich.	11			0.53															*		
Dodge, Kans.	4			0.04															*		
Dubuque, Iowa.	4			0.04															*		
Duluth, Minn.	27-29			0.40															*		
Eastport, Me.	11-12			0.96															0.41		
Elkins, W. Va.	11-12			0.73															0.17		
Erie, Pa.	2-3			0.51															*		
Escanaba, Mich.	28-30			0.51															0.14		
Evansville, Ind.	11			0.55															*		
Fort Smith, Ark.	27			0.58															0.31		
Fort Worth, Tex.	20-21			0.67															0.14		
Galveston, Tex.	10	D. N.	7:20 a. m.	1.08	6:10 a. m.	6:48 a. m.	0.42	0.04	0.09	0.11	0.21	0.46	0.49	0.56	0.64					*	
Grand Haven, Mich.	2-4			0.51															*		
Grand Junction, Colo.																					
Green Bay, Wis.	6-8			0.41															*		
Harrietta, Pa.	2-3			1.23															0.25		
Hatteras, N. C.	20-21			1.44															0.27		
Huron, S. Dak.	10			0.03															*		
Indianapolis, Ind.	2-3			1.16															0.20		
Jacksonville, Fla.	17			1.09															0.38		
Jupiter, Fla.	20	12:15 a. m.	5:30 p. m.	3.33	1:50 p. m. 8:52 a. m.	2:40 p. m. 9:30 a. m.	2.01 0.13	0.04 0.18	0.08 0.47	0.15 0.67	0.34 0.87	0.49 1.02	0.60 1.11	0.66 1.13	0.67 1.21	0.77 1.26	0.89 1.26	0.93			
Kalispell, Mont.	2-3			0.53															*		
Kansas City, Mo.	23			0.24															*		
Key West, Fla.	20			1.05															0.50		
Knoxville, Tenn.	23-24			0.45															0.29		
La Crosse, Wis.	10			0.05															*		
Lewiston, Idaho.	2			0.41															0.08		
Lexington, Ky.	11			0.48															*		
Lincoln, Nebr.	10			0.21															*		
Little Rock, Ark.	10-11			0.67															0.33		
Los Angeles, Cal.	27-28			1.72															0.22		
Louisville, Ky.	2			1.00															0.17		
Lynchburg, Va.	2			2.36															0.44		
Macon, Ga.	11			0.51															0.22		
Memphis, Tenn.	1-2			1.35															0.32		
Meridian, Miss.	10-11	8:30 a. m.	5:00 a. m.	2.85	1:50 a. m.	2:20 a. m.	1.62	0.07	0.16	0.25	0.35	0.45	0.53	0.55					*		
Milwaukee, Wis.	11			0.17																	
Montgomery, Ala.	1-2	7:20 p. m.	7:20 a. m.	1.06	3:40 a. m.	4:10 a. m.	0.35	0.04	0.12	0.29	0.42	0.58	0.66						0.24		
Nantucket, Mass.	21			0.60																	
Nashville, Tenn.	1			0.41															0.18		
New Haven, Conn.	2-3			0.70															0.39		
New Orleans, La.	1-2			0.94															0.37		
New York, N. Y.	2-3			1.05															0.36		
Norfolk, Va.	11			0.26															0.21		
Northfield, Vt.	21			0.76															*		
North Head, Wash.	1-3			3.19															0.20		
Oklahoma, Okla.	20			0.07															0.03		
Omaha, Nebr.	10			0.03															0.01		
Palestine, Tex.	26			0.52																	
Parkersburg, W. Va.	2-3			0.92															0.21		
Pensacola, Fla.	28	7:40 a. m.	12:25 p. m.	2.86	7:41 a. m.	9:30 a. m.	T.	0.11	0.36	0.41	0.43	0.46	0.64	1.04	1.13	1.27	1.35	1.64	1.85	2.39	
Philadelphia, Pa.	2-3			1.17															0.32		
Pittsburg, Pa.	20-21			0.56															*		
Pocatello, Idaho.	26-28			0.72															*		
Portland, Me.	21			2.40															0.66		
Portland, Oreg.	23-24			1.63															0.17		
Pueblo, Colo.	10-11			0.20															*		
Raleigh, N. C.	1-2			0.78															0.35		
Richmond, Va.	2-3			1.67															0.52		
Rochester, N. Y.	2-3			0.60															*		
Sacramento, Cal.	27			1.40															0.25		
St. Louis, Mo.	1-2			0.63															0.15		
St. Paul, Minn.	6-7			0.11															0.02		
Salt Lake City, Utah.	27-28			1.16															*		
San Antonio, Cal.	15-16																				

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TABLE V.—Accumulated amounts of precipitation for each 5 minutes, etc.—Continued.

Stations.	Date.	Total duration.		Total amount of precipita-	Excessive rate.		Amount before excessive began.	Depths of precipitation (in inches) during periods of time indicated.													
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
Tampa, Fla.	1 26	2 4:35 p. m.	3 10:20 p. m.	4 0.90	5 7:40 p. m.	6 8:23 p. m.	7 0.03	0.12	0.33	0.46	0.56	0.61	0.65	0.67	0.80	0.85	...	0.11	...	...
Taylor, Tex.	1			0.68														*			
Toledo, Ohio	11			0.41														*			
Topeka, Kan.	23			0.30														*			
Valentine, Nebr.	22-23			0.11														*			
Vicksburg, Miss.	1-2			2.05														0.44			
Washington, D. C.	2-3			1.86														0.45			
Wilmington, N. C.	2			1.09														0.58			
Yankton, S. Dak.	29			0.08														*			
Bridgetown, Barbados	16			0.18														0.10			
Havana, Cuba	18	9:00 a. m.	12:35 p. m.	1.02	10:25 a. m.	10:38 a. m.	0.24	0.24	0.58	0.63											
Puerto Principe, Cuba	3	6:05 p. m.	7:58 p. m.	1.06	6:08 p. m.	6:35 p. m.	0.01	0.14	0.42	0.63	0.77	0.88	0.93								
San Juan, Porto Rico	31			0.73																	

*Self-register not working.

TABLE VI.—Data furnished by the Canadian Meteorological Service, January, 1903.

Stations.	Pressure, in inches.				Temperature.				Precipitation.				Stations.	Pressure, in inches.				Temperature.				Precipitation.				
	Actual, reduced to mean of 24 hours.		Sea level, reduced to mean of 24 hours.		Departure from normal.		Mean.		Total.		Departure from normal.		Depth of snow.			Actual, reduced to mean of 24 hours.		Sea level, reduced to mean of 24 hours.		Departure from normal.		Mean.				
	In.	In.	In.	o	o	o	o	o	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.		
St. Johns, N. F.	29.70	29.74	-19	21.0	+ 0.5	28.9	13.2	6.18	+ 1.08	33.0						Parry Sound, Ont.	29.15	29.88	-13	16.4	+ 2.6	25.7	7.0	3.47	0.61	23.3
Sydney, C. B. I.	29.68	29.79	-18	25.3	+ 3.5	33.1	17.6	5.08	-0.68	16.8					Port Arthur, Ont.	29.18	29.92	-15	7.8	+ 4.7	17.9	-	2.2	0.28	2.3	
Halifax, N. S.	29.74	29.79	-20	24.5	+ 1.1	32.5	16.4	4.71	-0.20	11.8					Winnipeg, Man.	29.11	30.00	-11	2.3	+ 9.1	13.6	-	0.28	0.60	2.8	
Grand Manan, N. B.	29.74	29.79	-17	23.3	+ 2.0	34.9	21.7	5.30	-0.11	13.5					Minnedosa, Man.	28.03	29.95	-15	3.5	+ 10.7	15.1	-	8.1	0.33	11.3	
Yarmouth, N. S.	29.76	29.83	-17	23.3	+ 2.0	25.8	10.0	2.85	-1.11	20.7					Qu'Appelle, Assin.	27.58	29.94	-14	5.9	+ 9.7	15.7	-	4.0	1.10	+ 0.60	11.0
Charlottetown, P. E. I.	29.71	29.75	-21	17.9	+ 0.9	22.5	1.2	3.28	-0.31	20.3					Medicine Hat, Assin.	27.60	29.97	-10	18.9	+ 13.4	29.8	-	8.1	0.25	- 0.32	8.5
Chatham, N. B.	29.72	29.75	-22	11.8	+ 2.0	22.5	4.7	4.26	-1.41	42.1					Swift Current, Assin.	27.29	29.98	-11	15.1	+ 12.0	24.4	-	5.8	0.70	+ 0.06	6.6
Father Point, Que.	29.75	29.77	-21	12.4	+ 4.4	20.0	4.7	4.08	-1.41	42.1					Calgary, Alberta	26.22	29.86	-17	21.6	+ 13.2	31.3	-	11.9	0.05	- 0.48	9.4
Quebec, Que.	29.49	29.83	-19	11.0	+ 1.9	18.5	3.5	3.37	-0.64	29.0					Banff, Alberta	25.21	29.99	-01	18.3	+ 6.2	26.3	-	10.3	0.94	- 0.25	9.4
Montreal, Que.	29.66	29.89	-15	14.3	+ 2.6	21.6	7.0	4.08	+ 0.35	33.4					Edmonton, Alberta	27.52	29.91	-12	12.8	+ 11.0	22.5	-	3.1	0.97	+ 0.29	9.7
Bissett, Ont.	29.27	29.92	-10	14.9	- 1.5	18.1	8.3	1.34	-0.98	18.6					Prince Albert, Sask.	28.31	29.95	-14	2.5	+ 10.9	13.3	-	8.2	0.59	- 0.38	5.9
Ottawa, Ont.	29.60	29.94	-06	11.8	+ 2.2	20.4	3.2	2.82	-0.17	18.6					Battleford, Sask.	28.17	30.02	-06	2.7	+ 8.6	12.5	-	7.2	0.89	+ 0.49	8.9
Kingston, Ont.	29.58	29.92	-13	19.8	+ 2.7	27.7	11.8	2.65	-0.80	17.8					Kamloops, B. C.	28.74	29.99	+ 03	28.1	+ 5.1	33.3	-	22.5	0.35	- 0.47	3.5
Toronto, Ont.	29.52	29.92	-13	23.1	+ 1.7	29.8	16.3	2.71	-0.21	20.5					Victoria, B. C.	29.89	29.99	+ 02	41.9	+ 3.4	45.2	-	38.6	3.94	- 1.45	0.0
White River, Ont.	28.53	29.92	-09	1.0	+ 1.4	15.2	-13.1	1.36	-0.33	13.6					Barkerville, B. C.	25.53	29.94	+ 05	19.3	+ 1.5	26.9	-	11.7	1.40	- 1.20	14.0
Port Stanley, Ont.	29.27	29.94	-13	23.3	+ 1.1	30.2	16.5	3.11	+ 0.12	23.9					Hamilton, Bermuda	29.92	30.09	-04	64.2	+ 2.2	69.1	-	59.3	4.37	- 0.57	0.0
Saugeen, Ont.	29.15	29.88	-15	22.5	+ 2.1	29.9	15.1	3.82	-0.23	32.7																

TABLE VII.—Heights of rivers referred to zeros of gages, January, 1903.

Stations.	Highest water.				Lowest water.				Mean stage.	Distance to month of river.	Danger line on gage.	Highest water.				Lowest water.				Mean stage.	Distance to month of river.	Danger line on gage.
	Height.	Date.	Height.	Date.	Height.	Date.	Height.	Date.				Height.	Date.	Height.	Date.	Height.	Date.	Height.	Date.			
<i>Mississippi River.</i>																						
St. Paul, Minn. ¹	Miles.	Feet.	Feet.		Feet.		Feet.															
Red Wing, Minn. ¹	1,954	14	14		12		1.4															
Reeds Landing, Minn. ²	1,884	12																				
La Crosse, Wis. ¹	1,819	12																				
Prairie du Chien, Wis. ¹	1,759	18																				
Dubuque, Iowa. ¹	1,699	15																				
LeClaire, Iowa. ¹	1,609	10																				
Davenport, Iowa. ³	1,593	15																				
Muscatine, Iowa.	1,562	16	8.4	2	4.5	25	6.1	3.9														
Galland, Iowa.	1,472	8	3.5	12	1.4	27-29	2.4	2.1														
Keokuk, Iowa.	1,463	15	4.2	6.7	2.3	27, 28	3.0	3.2	1.9													
Hannibal, Mo.	1,402	13	6.0	19-21	4.0	1-3, 12-15	4.9	2.0														
Grafton, Ill.	1,306	23	7.9	31	5.3	15	6.7	2.6														
St. Louis, Mo.	1,264	30	10.4	29	4.5	16	7.4	5.9														
Chester, Ill.	1,189	30	8.5	30, 31	4.1	16, 17	6.1	4.4														
New Madrid, Mo.	1,008	34	27.2	1	14.4	29	20	12.8														
Memphis, Tenn.	843	33	28.8	1	10.4	30, 31	18.4	18.4														
Helena, Ark.	767	42	38.8	1	16.9	31	27.6	21.9														
Arkansas City, Ark.	635	42	41.4	3	21.6	31	33.4	19.8														
Greenville, Miss.	595	42	35.6	3	17.3	31	2															

TABLE VII.—*Heights of rivers referred to zeros of gages*—Continued.

¹ Frozen. ² Frozen 25 days. ³ Frozen 23 days. ⁴ Frozen 17 days. ⁵ Frozen 16 days. ⁶ Frozen 18 days. ⁷ Frozen 3 days. ⁸ Frozen 22 days. ⁹ Frozen 20 days. ¹⁰ Frozen 19 days.

¹¹ Frozen 7 days. ¹² Frozen 6 days. ¹³ Frozen 24 days. ¹⁴ Frozen 1 day. ¹⁵ Frozen 4 days. ¹⁶ Frozen 26 days. ¹⁷ Frozen 21 days. ¹⁸ Frozen 2 days. ¹⁹ 27 days.

CLIMATOLOGY OF COSTA RICA.

Communicated by H. PITTSIE, Director, Physico-Geographic Institute.

TABLE 1.—Hourly observations at the Observatory, San José de Costa Rica, during January, 1903.

Hours.	Pressure.		Temperature.		Relative humidity.		Rainfall.	
	Observed, 1903.	Normal, 1889-1900.	Observed, 1903.	Normal, 1889-1900.	Observed, 1903.	Normal, 1889-1900.	Observed, 1903.	Normal, 1889-1900.
1 a. m.	Inches.	Inches.	° F.	° F.	%	%	Ins.	T.
1 a. m.	26.17	26.14	62.0	61.5	84	85	.00	0.00
2 a. m.	26.16	26.12	61.9	61.2	83	85	.00	0.00
3 a. m.	26.14	26.11	61.3	60.8	84	86	.02	0.75
4 a. m.	26.13	26.11	61.0	60.4	84	86	.01	1.00
5 a. m.	26.13	26.11	61.0	60.8	85	86	.02	0.00
6 a. m.	26.13	26.13	60.3	59.0	84	86	.00	0.00
7 a. m.	26.15	26.13	60.3	59.2	84	86	.00	0.00
8 a. m.	26.16	26.15	60.6	61.9	76	81	.00	0.00
9 a. m.	26.18	26.17	66.9	66.7	66	73	.00	0.00
10 a. m.	26.19	26.17	70.5	70.2	63	68	.00	0.00
11 a. m.	26.18	26.16	72.5	72.5	56	64	.00	0.00
Noon	26.16	26.15	74.7	73.8	53	62	.00	T. 0.00
1 p. m.	26.15	26.13	76.1	74.8	56	61	.00	.02 0.00
2 p. m.	26.12	26.10	76.3	74.8	50	61	.00	.01 0.00
3 p. m.	26.10	26.09	75.6	74.1	54	63	.00	.02 0.00
4 p. m.	26.10	26.08	74.1	72.6	61	65	.10	.08 1.00
5 p. m.	26.10	26.09	70.5	70.3	66	69	.01	.11 0.50
6 p. m.	26.11	26.10	68.2	67.5	72	75	.00	.04 0.00
7 p. m.	26.13	26.11	66.2	65.3	79	79	.01	.02 0.50
8 p. m.	26.15	26.13	65.1	64.2	81	82	.02	.04 0.75
9 p. m.	26.16	26.15	64.6	63.7	81	82	.00	T. 0.00
10 p. m.	26.18	26.16	63.9	63.0	83	83	.00	.02 0.00
11 p. m.	26.18	26.16	63.3	62.4	84	85	.00	.02 0.00
Midnight	26.18	26.15	63.0	61.9	83	85	.00	T. 0.00
Mean	26.15	26.13	66.6	65.8	73	77	.....	.....
Minimum	25.99	25.98	53.4	49.5	20	.....	.....	.....
Maximum	26.30	26.30	85.5	86.5	100	.....	.....	.....
Total	.....	.....	.....	.....	19	.46	5.50	.....

REMARKS.—At San José the barometer is 1,169 meters above sea level. Readings are corrected for gravity, temperature, and instrumental error. The hourly readings for pressure, and wet and dry bulb thermometers, are obtained by means of Richard registering instruments, checked by direct observations every three hours from 7 a. m. to 10 p. m. The thermometers are 1.5 meters above ground and are corrected for instrumental errors. The total hourly rainfall is as given by Hottinger's self-register, checked once a day. Under maximum, the greatest hourly rainfall for the month is given. The standard rain gage is 1.5 meters above ground. Since January 1, 1902, observations at San José have been made or seventy-fifth meridian time, which is 0 hours, 36 minutes, 13.3 seconds *in advance* of San José local time. The normals for pressure, temperature, and relative humidity have been adjusted to this time; the normal for rainfall in Table 1 and the sunshine observations and normal in Table 2 refer to local time. At Port Limón the hours of direct observation are 8 a. m., 2 and 8 p. m., San José local time; the barometer is 3.4 meters above sea level. The means for temperature and relative humidity in Table 4 are obtained from two-hourly readings given by a Richard self-registering thermometer.

TABLE 2.

Time.	Sunshine.		Cloudiness.		Temperature of the soil at depth of—				
	Observed, 1903.	Normal, 1889-1900.	Observed, 1903.	Normal, 1889-1900.	6 inches.	12 inches.	24 inches.	48 inches.	120 inches.
7 a. m.	Hours.	Hours.	%	%	° F.	° F.	° F.	° F.	° F.
7 a. m.	6.24	8.28	33	39	70.9	71.6	72.0	70.7	70.5
8 a. m.	23.91	22.43	.....	.....	.....	.....	.....	.....	.....
9 a. m.	22.95	22.55	.....	.....	.....	.....	.....	.....	.....
10 a. m.	21.19	20.73	61	44	71.2	71.6	72.1	71.1	.....
11 a. m.	18.80	19.74	.....	.....	.....	.....	.....	.....	.....
Noon	19.74	18.42	.....	.....	.....	.....	.....	.....	.....
1 p. m.	18.84	17.99	63	53	72.5	72.0	72.1	71.1	.....
2 p. m.	21.21	19.74	.....	.....	.....	.....	.....	.....	.....
3 p. m.	21.05	19.23	.....	.....	.....	.....	.....	.....	.....
4 p. m.	18.13	17.44	63	57	72.7	72.3	72.1	70.9	.....
5 p. m.	13.44	12.70	.....	.....	.....	.....	.....	.....	.....
6 p. m.	2.76	2.54	.....	.....	.....	.....	.....	.....	.....
7 p. m.	.....	.....	65	55	72.0	72.5	72.1	70.8	.....
8 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....
9 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....
10 p. m.	.....	.....	49	44	72.5	72.3	72.1	70.7	.....
11 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Midnight	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mean	.....	.....	50	49	72.0	72.1	72.1	70.9	70.5
Total	208.26	201.79	.....	.....	.....	.....	.....	.....	.....

TABLE 3.—Rainfall at stations in Costa Rica, January, 1903.

Stations.	Height above sea level.	Amount.	Observed, 1902.		Averages.	
			Feet.	Inches.	Number of years.	Amount.
Sipurio (Talamanca)	197	6.50	14	2	16.46	21
Boca Banano	10	12.01	14	7	12.91	20
Port Limon	10	15.39	19	4	14.80	19
Swamp Mouth	10	13.38	13	2	9.65	19
Zent	66	9.72	16	1	6.10	17
Siquirres	197	9.17	8	3	18.39	15
Dos Novillos	400	7.16	12	.....	.....	.....
Guapiles	984	7.52	20	2	15.08	16
Cariblanco (Sarapiquí)	2,740	16.22	21	4	21.61	23
San Carlos	528	6.93	14	4	10.00	18
Las Lomas	873	8.62	13	1	20.51	16
Peralta	1,089	6.14	13	4	10.19	17
Turrialba	2,034	.....	7	8.86	16	.....
Juan Viñas	3,412	3.19	7	6	8.94	16
Santiago	3,609	3.27	10	1	8.03	22
Paraiso	4,383	1.46	3	1	4.33	20
Cachi	3,346	11.26	18	1	3.03	23
Las Concavas	4,386	10.03	13	1	2.52	24
Tres Ríos	4,265	2.32	4	13	0.35	2
San Isidro Arenilla	3,894	0.24	2	6	0.79	5
San Francisco Guadalupe	3,806	1.93	5	14	0.43	3
San Jose	3,740	2.24	4	5	0.16	2
La Verbena	2,595	0.00	0	7	0.00	0
Nuestro Amo	3,117	0.00	0	2	0.00	0
Alajuela	4,416	0.00	0	1	0.00	0
San Isidro Alajuela	.....	.....	.....	.....	.....	.....

TABLE 4.—Observations taken at Port Limón and Zent, January, 1903.

Stations.	Pressure.		Temperature.		Relative humidity.
	Minim.	Max.	Minim.	Max.	
Port Limon	Inches.	Inches.	° F.	° F.	%
Zent	29.70	29.98	64.4	93.2	84
Port Limon	75	150.70	15.39	9.72	16
Zent	.....	.....	77.4	77.2	77.1
Stations.	Cloudiness.	Hours.	Rainfall.	Temperature of soil at depth of—	
	%	Hours.	Inches.	° F.	
Port Limon	75	150.70	15.39	9.72	19
Zent	.....	.....	77.4	77.2	77.1
Stations.	Cloudiness.	Hours.	Rainfall.	Temperature of soil at depth of—	
	%	Hours.	Inches.	° F.	
Port Limon	75	150.70	15.39	9.72	19
Zent	.....	.....	77.4	77.2	77.1

MEXICAN CLIMATOLOGICAL DATA.

By Señor MANUEL E. PASTRANA, Director of the Central Meteorologic-Magnetic Observatory.

January, 1903.

Stations.	Altitude.	Mean barometer.*	Temperature.			Prevailing direction.
			Max.	Min.	Mean.	
Chihuahua	4,684	25.25	75.2	29.3	56.8	50
Guadalajara (Obs. del Est.)	5,186	24.92	84.2	39.2	56.8	52.20
Guanajuato	6,640	23.68	77.0	38.1	54.0	60
Leon (Guanajuato)	5,906	24.25	74.1	33.4	52.9	64
Mazatlan	25	29.91	81.7	56.7	70.0	65
Merida	50	.....	.....	.....	1.37	n.w.
Mexico (Obs. Cent.)	7,472	23.01	71.1	39.2	54.5	50
Mexico (E. N. Agric.)	7,442	.....	.....	.....	.....	s.w.
Monterey (Seminario)	1,626	28.20	97.9	36.1	56.1	68
Morelia (Seminario)	6,401	23.89	73.4	38.8	54.0	68
Puebla (Col. Cath.)	7,108	23.33	72.9	40.6	56.5	57
Puebla (Col. d Est.)	7,118	23.31	73.9	35.6	54.0	58
Queretaro	6,070	24.11	70.7	39.2	54.9	52
Toluca	8,812	.....	.....	.....	0.87	e.
Zacatecas	8,015	22.44	75.4	26.2	46.4	58
Zapotlan	5,078	25.05	77.5	40.6	58.1	66

*The monthly barometric means are reduced to the international standard of gravity.